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ABSTRACT

This annotated bibliography is the first of a series of publications on Career Education to be prepared by the ERIC Clearinghouse on Teacher Education. The 150 entries were selected from a computer printout of all the material on vocational and career education appearing in "Research in Education" during the period from January 1970 to June 1972. The bibliography contains documents relating to teacher education in career and vocational areas and is arranged chronologically according to date of publication, with separate indexes for institutions and authors and a general index identifying certain major categories, such as annual report, collections of speeches, guidelines, doctoral theses, program descriptions, and research, as well as specific content areas such as business education, in-service and preservice programs, and industrial education. The bibliography was prepared to document what has already been published on this subject and to provide a base for further research and publication describing what new ideas are being tried, which institutions are launching new programs, and what new trends are developing. (MBM)

ED 067382

AN ABSTRACT BIBLIOGRAPHY OF TEACHER EDUCATION PROGRAMS: PART I OF THE ERIC CLEARINGHOUSE ON TEACHER EDUCATION PROJECT ON CAREER EDUCATION

by Moira B. Mathieson

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FOREWORD

This bibliography is the first part of a project on career and vocational education undertaken by the ERIC Clearinghouse on Teacher Education under special funding provided by the National Center for Educational Communications, U.S. Office of Education (many of whose functions are a part of the National Institute of Education). The effort is to bring together ideas and information which can enable the nation to help its prospective citizens to gain an understanding of the economic, psychological, and social implications of work. The related activities in the project are a bibliography of bibliographies on career and vocational education; (b) an in-depth survey of existing programs for teacher education in career and vocational areas; (c) proposals for future developments; (d) a paper on the theory and rationale of career education; and (e) an "anthology" of personal reactions to the concept of career education. The overall impact of the project, hopefully, can be rather strong: a better understanding of the implications of career education, identification of gaps in the idea and knowledge base to be filled, and motivation to take action on every level in education.

The activities of this project, then, are essentially to create a clearer picture of the state-of-the-art now. As always, the expectation is that needed actions can more intelligently follow. Our initial conclusion is that there is a dearth of bonafide career education material reported in the ERIC system or available elsewhere. While there are many, many documents on vocational and technical education, there appears to be little authentic documentation of the field of career education broadly conceived.

You may do further research on this topic by checking issues of Research in Education (RIE) and Current Index to Journals in Education (CIJE). Both RIE and CIJE use the same descriptors (index terms). Documents in RIE are listed in blocks according to the clearinghouse code letters which processed them, beginning with the ERIC Clearinghouse on Adult Education (AC) and ending with the ERIC Clearinghouse on Vocational and Technical Education (VT). The clearinghouse code letters, which are listed at the beginning of RIE, appear opposite the ED number at the beginning of each entry. "SP" (School Personnel) designates documents processed by the ERIC Clearinghouse on Teacher Education.

In addition to using the ERIC Thesaurus, RIE, CIJE, and various ERIC indexes, you will find it helpful to be placed on the mailing list of the ERIC clearinghouses which are likely to abstract and index as well as develop publications pertinent to your needs and interests. The newsletters are provided on a complimentary basis on request to the individual clearinghouses.

For readers uncertain how to use ERIC capabilities effectively, we recommend the following materials which are available in microfiche and hardcopy through the ERIC Document Reproduction Service: (a) How To Conduct a Search Through ERIC, ED 036 499, microfiche $.65, hardcopy $3.29; (b) Instructional Materials on Educational Resources Information

Center (ERIC). Part Two. Information Sheets on ERIC, ED 043 580, microfiche $.65; hardcopy $3.29. Item "b" is available as a complimentary item, while the supply lasts, from this Clearinghouse. The last page of this publication is an "ERIC Order Blank" which gives instructions for ordering materials and can be used for ordering.

Joel L. Burdin
Director

October 1972

ABSTRACT

This annotated bibliography is the first of a series of publications on Career Education to be prepared by the ERIC Clearinghouse on Teacher Education. The 150 entries were selected from a computer printout of all the material on vocational and career education appearing in "Research in Education" during the period from January 1970 to June 1972. The bibliography contains documents relating to teacher education in career and vocational areas and is arranged chronologically according to date of publication, with separate indexes for institutions and authors and a general index identifying certain major categories, such as annual report, collections of speeches, guidelines, doctoral theses, program descriptions, and research, as well as specific content areas such as business education, in-service and preservice programs, and industrial education. The bibliography was prepared to document what has already been published on this subject and to provide a base for further research and publication describing what new ideas are being tried, which institutions are launching new programs, and what new trends are developing. (MBM)

ERIC DESCRIPTORS

To expand a bibliography using ERIC, descriptors or search terms are used. To use a descriptor: (1) Look up the descriptor in the SUBJECT INDEX of monthly, semi-annual, or annual issue of Research in Education (RIE). (2) Beneath the descriptors you will find title(s) of documents. Decide which title(s) you wish to pursue. (3) Note the "ED" number beside the title. (4) Look up the "ED" number in the "DOCUMENT RESUME SECTION" of the appropriate issue of RIE. With the number you will find a summary of the document and often the document's cost in microfiche and/or hardcopy. (5) Repeat the above procedure, if desired, for other issues of RIE and for other descriptors. (6) For information about how to order ERIC documents, turn to the back pages of RIE. (7) Indexes and annotations of journal articles can be found in Current Index to Journals in Education by following the same procedure. Periodical articles cannot be secured through ERIC.

TOPIC:

DESCRIPTORS TO USE IN CONTINUING SEARCH OF RIE AND CIJE:

*Bibliographies
*Career Education
*Inservice Teacher Education
Occupational Guidance
Preservice Education
*Teacher Education
*Vocational Education

*Asterisk(s) indicate major descriptors.

SOME DEFINITIONS

Vocation: The membership of a particular occupational group; the persons engaged in a field of business, profession or trade. (Webster's Third New International Dictionary of the English Language, Unabridged, Springfield, Massachusetts, 1969.)

Vocational Education: A program of education below college grade organized to prepare the learner for entrance into a particular chosen vocation or to upgrade employed workers; includes such divisions as trade and industrial education, technical education, agricultural education, distributive education, and home economics education.
(Good, Carter V., Dictionary of Education, McGraw-Hill, 1959.)

Career: A course of continued progress (as in the life of a person or nation; a field for or pursuit of consecutive progressive achievement esp. in public, professional, or business life.
(Webster, op. cit.)

INTRODUCTION

This bibliography is the first stage of a major project undertaken by the ERIC Clearinghouse on Teacher Education under a special grant from Central ERIC, National Center for Educational Communication, National Institute of Education. The entries were selected from a computer printout of all the material on vocational and career education appearing in "Research in Education" during the period from January 1970 to June 1972.

The bibliography is arranged chronologically according to date of publication to provide an overall picture of the development of vocational and career education during the past six years, as reflected in the ERIC documents. There are separate indexes for institutions and authors, and a general index identifying certain major categories, such as annual reports, collections of speeches, guidelines, doctoral theses, program descriptions, and research, as well as specific content areas such as business education, preservice and in-service programs, and industrial education.

The concept of career education has been making slow progress if one accepts the evidence of these documents. It is discussed first by Maley (59)* in his May 1969 report on a 4-year research and development project aimed at opening up the objectives of vocational education to provide students with wide choices in the work they will do. Maley does not use the term "career education" and is still thinking of the traditional fields of vocational education, but the Office of Education Conference Report (122), published in March 1971, outlines the complete concept of career education as intended to introduce the world of careers; provide exploration, guidance, counseling, specific skills; and upgrade and retrain through adult life. In May 1971 Commissioner of Education Marland (124) described the model career education programs being developed by the Office of Education and intended to apply to all levels of growth, rather than only to "vocational" programs in the traditional sense of the word. Finally, in September 1971 Marland (134) again defined his views on career education and outlined its development from kindergarten level through high school and college. It should be noted that certainly more has been and is being written on career education than has so far found its way into the ERIC system. We hope that as a result of this publication users will draw our attention to such material so that it, also, may be included in ERIC.

Strictly speaking, then, this bibliography contains only four citations dealing with career education and none of these is concerned specifically with teacher education programs. This does not mean that the bulk of the bibliography is not of value in defining the present state of career and vocational education and identifying the directions for future development. We believe that this bibliography provides a solid foundation from which to work, by pulling together references to

*Numbers in parenthesis refer to the items in the bibliography.

a large number of documents and indicating those areas which have been well researched as well as those which have not. As the bibliography was being prepared, it became clear that existing programs of vocational teacher education have usually been of short duration and have concentrated on narrow topics. In-service programs, seminars, summer institutes, and workshops greatly outnumber the preservice programs, and several of these preservice programs are also concerned with limited objectives--the use of video recording and microteaching (21), training for leadership (33), and teaching techniques (57). Many of the surveys show that the teachers' vocational background is often obtained by work experience in the subjects they teach, combined with the usual education courses. While there is no reason to suppose that this is a bad way to prepare to teach data processing, auto mechanics, or agricultural technology, it makes no provision for any understanding of the wider problems which must be faced if Commissioner Marland's aims and hopes are to be fulfilled. A highly qualified, competent business skills teachers may be less qualified than a liberal arts teacher to guide students into the careers for which they are best suited. This is in no way to denigrate the importance of teaching shorthand or bookkeeping. But the shorthand and bookkeeping students must know how and where they can best use those skills and what alternatives are open to them in widely different fields, and they must be prepared for the whole of life rather than for just a small segment. Dwight Crum (122) says that career education must replace general education, but he does not mean that all students should receive only limited vocational training for specialized jobs which may change before they have had an opportunity to put their skills to use. By relating all subjects--math, English, social studies--to the real world of work and life, students can become aware of the choices open to them and can also more easily avoid becoming trapped in a declining or too restricted occupation.

In order to provide this new career education in the schools, there must also be changes in the methods used to prepare teachers. This bibliography was compiled to demonstrate what was already being done, and from the evidence it provides, the answer has to be, "not enough." It must be remembered, however, that it takes time to develop and test a program, and there are certainly experiments under way which have not yet been written up or published. This bibliography represents only the first step and the base for future work. With this background information on what the situation has been in the past, it will now be possible to discover what new ideas are being tried, which institutions are launching new programs, and, most importantly, what new trends are developing which have yet to be implemented. These will be the next and most important stages in the Clearinghouse's Career Education Project.

The present document indicates where Career Education stands today, according to the documents currently available. We hope that it will help us to identify many of the existing programs which have not yet been reported and also stimulate teacher educators to think, both deeply and constructively, about the implications of this new direction in education and about the contributions which they can make to ensure its success.

AN ABSTRACT BIBLIOGRAPHY OF TEACHER EDUCATION PROGRAMS: PART I OF THE ERIC CLEARINGHOUSE ON TEACHER EDUCATION PROJECT ON CAREER EDUCATION

1. Miller, Dudley B. "A Critical Analysis of the Vocational Guidance Practice Employed by Industrial Arts Teachers in Selected Junior High Schools in the United States." Unpublished Doctor's dissertation, Pennsylvania State University, March 1965. 169p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 65-9817.
ED 058 427. Not available from EDRS.

This study investigated (a) the formal guidance preparation of industrial arts teachers, (b) the vocational guidance resources available to industrial arts teachers, (c) the opinions of industrial arts teachers toward vocational guidance, and (d) the vocational guidance functions performed by industrial arts teachers. A nationwide sample of 538 junior high schools was selected and mailed a survey questionnaire. The data from 438 usable forms were compiled by computer and t-tests were used to determine significant differences. It was found that (a) college coursework in guidance was included in 62 percent of the teachers' professional preparation; (b) full-time counselors were employed by 66 percent of the schools; (c) a majority, 76 percent of the teachers believed industrial arts teachers to be the most qualified members in their school to interpret guidance information relative to industrial pursuits; and (d) most of the guidance services rendered by industrial arts teachers are of the classroom type. It is recommended, based on the findings of this study, that vocational guidance resource units be made more available to industrial arts teachers.

2. Larson, Milton Erving. A Study of the Characteristics of Students, Teachers, and the Curriculum of Industrial-Technical Education in the Public Community Junior Colleges of Michigan. East Lansing: Michigan State University, Department of Secondary Education, 1965. 364p.
ED 025 255. EDRS Price: MF-$0.65; HC-$13.16.

Observations were made on the characteristics of students, teachers, and curricula of the industrial-technical programs of Michigan junior colleges. Of the 138 teachers, 75 were employed by five colleges, 50 percent had a master's degree, many had a bachelor of arts in industrial arts, 65 percent had up to 12 semester hours in teaching methods, the median for subject matter was 18 hours, 21 had completed an apprenticeship, related work experience averaged 50 months, the median number of years' teaching was eight, and 38 percent had both community college and vocational certificates. Thirty-eight industrial-technical programs were classified under 13 curricular headings; the most frequent curriculum was drafting, least frequent were architecture, body drafting,

and industrial management, most common admission requirement was high school graduation, most common graduation requirement was completion of 62 semester hours with GPA of 2.0. Among the many findings on all of the 297 students were: all respondents were male, 74 percent were under 21, 54 percent were district residents, 60 percent were from non-professional backgrounds, 52 percent worked part-time and 22 percent full-time while in college, 39 percent would choose the same occupation again, most were satisfied with the counseling service except job placement, 40 percent found their own job, 31 percent wanted less theory and more practice, 39 percent believed college helpful in getting a job, 50 percent were satisfied with their job although only 35 percent were doing college-related work. Supplementary observations were made on the 101 (34 percent) graduates.

3. University of Southern Mississippi. Mississippi Higher Education Conference on Junior Senior College Core Curriculum Compact and Re-Professional Programs. Proceedings of the Annual Junior College Workshop, June 28-29, 1966, Hattiesburg, Mississippi. 83p.
ED 021 550. EDRS Price: MF-$0.65; HC-$3.29.

The following major problems were discussed at a junior college workshop in Mississippi: (a) the formation of a framework within junior and senior colleges might develop core curricula or general education requirements acceptable for transfer between the institutions, and (b) the role of the junior colleges with respect to course offerings in the professional and pre-professional areas. Major addresses were given on such topics as the vocational and technical programs in the public junior colleges of the state, the role and scope of eight Mississippi institutions, uniform course numbering, pre-professional requirements for teacher and pre-professional requirements in arts and science.

4. McGregor, G. C., and Robert R. Reynolds. In-Service Training in Computer-Assisted Instruction for Vocational Teachers. Final Report. Providence: Providence College Computer Center, 1966. 52p.
ED 021 988. EDRS Price: MF-$0.65; HC-$3.29.

This project was the third in a proposed 5-phase project for developing vocational education curriculum for junior and senior high school students. Thirteen vocational education teachers participated during the period from July 13 to October 15, 1966. A specific objective for each participant was to develop a one-semester course in his particular subject area which would be used in establishing a Computer Assisted Instruction (CAI) curriculum in vocational education. The objective of completing a semester's course appeared to have been too ambitious. From 50 to 150 hours of work was required to produce one 40-minute class lesson. Only one to one and one-half class lessons could be prepared since the participants spent 15 hours in preparation each week in addition to required attendance of 2 hours each evening, Monday through Thursday for 6 weeks. The most important single impediment of

the project was the lack of reliability of the CAI equipment. Recommendations and guidelines for future programs are listed. A sample course section, "Introduction to Data Processing," for CAI instruction is included in the appendix.

5. San Francisco State College. Curriculum Programs in Action, Their Adminstration and Evaluation: Report of a Conference Devoted to Description, Demonstration, and Evaluative Discussions of Innovative Programs in Vocational-Technical Education. San Francisco State College; Madison: University of Wisconsin, Center for Studies in Vocational and Technical Education, 1966. 128p.
ED 022 897. EDRS Price: MF-$0.65; HC-$6.58.

The presentation, review, and evaluation of innovative vocational-technical curriculums in operation was the major function of a San Francisco conference sponsored jointly by the Center for Technical Education at San Francisco State College and the Center for Studies in Vocational and Technical Education at the University of Wisconsin. Major presentations were "Making Education Relevant," by M. Feldman; "The Role of the Administrator in the Pre-Tech Program," by W. Plutte; "The Role of the High School Principal," by A. W. Richards; "The Teacher's Role in the Pre-Tech Program," by R. Dycus; "The Richmond Plan--A Concept of Teacher Re-Education," by J. C. Briscoe; "Evaluating the Technology Programs," by L. Batmale; "A Curriculum in Action--Teacher Education," by H. Stadermann; "A Management Approach to Making Education Relevant," by W. J. Fletcher; "The Partnership Vocational Education Project," by E. L. Minelli; "Interdiscipline Programs in VICOED," by R. Schwalm; "Up to Seventy Percent," by L. J. Kishkunas; and "The American Industry Project," by O. W. Nelson.

6. Long, Robert Charles. "A Study To Determine the Effect of the Vocational Education Act of 1963 Upon Business Teacher Education Programs in Selected Colleges and Universities." Unpublished Doctor's dissertation, University of North Dakota, January 1967. 170p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 67-9586.
ED 055 182. Not available from EDRS.

The problem of this study was to assess the innovations, if any, that have been made in selected business teacher education institutions to implement the provisions of their state plan for vocational education. Areas of primary concern were (a) to identify and analyze the changes in the teacher education curriculums for the preparation of office education teachers, and (b) to ascertain the differences in the teacher education curriculums preparing office education teachers and coordinators for secondary schools, selected post secondary schools, Manpower and Job Corps programs, and private business schools. Based on data collected by interviews and questionnaires, it was revealed that 65 of the 141 institutions offered teacher education programs that had been implemented with the provisions of the state plan. A major conclusion of the study is that the direction given to administrators of

business teacher education programs for implementing the provisions of their state plans into their curriculums appears to be indefinite and inadequate. Other findings and conclusions are discussed.

7. Traicoff, George, Jr. "The Knowledge and Opinions of Business Educators Toward Vocational Education with Special Emphasis Toward Distributive Education." Unpublished Doctor's dissertation, University of Indiana, June 1967. 320p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 67-16,439.
ED 055 231. Not available from EDRS.

This study was conducted to lend insight to possible methods of recruiting and preparing distributive education teacher-coordinators, a problem which has concerned state supervisors and teacher-coordinators for several decades. The first section of the inquiry form solicited information on the individual completing the form and the institution where he teaches or studies. The remainder of the form was structured to gather opinions and attitudes of teachers and students toward distributive education. Among the findings of this study were (a) approximately 70 percent of the high school business teachers received their education at a state university or college, and the remainder at a private, city, or business college or university; (b) over 35 percent of these teachers had taken a course dealing with the principles of vocational education during their college work; and (c) over 88 percent of the high school business teachers and 80 percent of the business education majors stated that they had never been discouraged from becoming distributive education coordinators.

8. Van Tassel, Carol, ed. Guidelines for Professionals Working with Persons with Special Needs Developed from the Seminar for Supervisors and Teacher Educators of Teachers of Persons with Special Needs. Lexington: Kentucky Research Coordinating Unit, June 1967. 11p.
ED 028 236. EDRS Price: MF-$0.65; HC-$3.29.

This summary of consultative discussions is not intended to represent a definitive study of the topic, but rather a beginning. Four general guidelines of themes emerged from the seminar regarding vocational education for persons with special needs: (a) Professional vocational education personnel must become more concerned with people and less concerned with programs; (b) Vocational education has far more to offer persons with special needs than any other area, particularly a traditional liberal arts course of study; (c) Teachers of persons with special needs should be individuals who receive intrinsic satisfaction from working with the disadvantaged and who are not bound by tradition; and (d) Persons with special needs generally migrate less than individuals who have achieved higher levels of education. Guidelines are provided in the areas of (a) characteristics of persons with special needs, (b) characteristics of the Negro sub-culture and the additional problems of this group, (c) guidelines for teacher education programs, and

(d) guidelines for programs for persons with special needs. There are general or working guidelines and will be be revised, reworked, and rewritten as vocational educators increase their knowledge and understandings of persons with special needs.

9. Buntin, L. Ann. Report of Workshop for the Study of the Disadvantaged for Selected Teachers of Occupational Training. Lubbock: Texas Technological College, July 1967. 56p.
ED 022 011. EDRS Price: MF-$0.65; HC-$3.29.

Forty two teachers and supervisors, selected by the Texas Education Agency, participated in a 2-week workshop designed to provide an intensive study of the disadvantaged and to increase the effectiveness of teachers of culturally disadvantaged youth, primarily in the area of occupational training. Scholars in the field of sociology and phychology served as consultants. The first week of the workshop was oriented toward understanding the life-styles of the disadvantaged, with an examination of such factors as relevant socio-cultural concepts, the culture of poverty, minority group relations, and strategies and alternatives for solving the problems of the disadvantaged. During the second week, an attempt was made to translate insight gained during the first week into teaching goals and techniques. Consultants provided opportunities for participants to explore some introductory strategies of implementation involved in teaching the disadvantaged, to set forth basic concepts relative to differential perception, to develop a motivational system for more effective instruction, and to recognize the influence of emotions and prejudicial attitudes in understanding and teaching the disadvantaged. The workshop seems ultimately to have not only made a contribution to knowledge but to the belief that there is worth in every individual. A bibliography is included.

10. Wick, S. K., and W. A. Kavanaugh. An Introduction To Teaching Vocational Technical Education, A Pre-Service Teacher Training Course for Potential Vocational Teachers in Minnesota. Final Report. St. Paul: Minnesota State Department of Education, July 1967. 27p.
ED 024 784. EDRS Price: MF-$0.65; HC-$3.29.

This project was to revise and change the format of 12 institutional units for the professional, preservice education of potential vocational teachers in Minnesota. These 2-hour units included 30-minute filmed presentations. Developmental activities included the trial use of these units on 60 potential teachers in four separate classes. The materials included a detailed course of instruction, achievement tests, instructional materials, and a leader's guide. The units are "Teaching in Vocational-Technical Schools," "Analyzing for Instruction," "Organizing Course Components," "Planning the Lesson," "Teaching for Understanding," "Teacher for Motor-Skill Development," "Teaching with Instructional Aids," "Developing Instructional Aids," "Evaluating Instructional Outcomes," "Developing Evaluative Materials," "Managing Teaching-Learning Facilities," and "Planning Your Teaching Career." The appendix (ED 024 785) contains course objectives, unit objectives, a list of lesson materials, unit examination, and film scripts with cues indicating when to use visual aids.

11. Cone, Bonnie E., and Philip D. Vairo, eds. Occupational Education: A Challenge to the Two-Year College. Raleigh: North Carolina State Board of Education, Department of Community Colleges; Charlotte: University of North Carolina, September 1967. 54p.
ED 026 486. EDRS Price: MF-$0.65; HC-$3.29.

This conference presented a variety of papers focused on the rationale that providing more and better quality education for the world of work is vital for the South and is of twofold urgency because millions of Southerners are ill-prepared to seize existing employment opportunities and business and industry must have an adequate force of well-trained tradesman and technicians if the South's rapid economic development is to continue. Topics include "Occupational Education in the North Carolina Community College System," "Accreditation of Occupational Education Programs," and "Preparation of Personnel in Occupational Education." A 100-item selected bibliography on occupational education in a 2-year college is included.

12. Dobrovolny, Jerry S., and Thomas C. Hartley. Ungrading the High School Drafting Teachers: An Eight-Week Summer Training Program To Upgrade Subject Matter Competency of High School Drafting Teachers in Advanced Graphics, Statics, and Applied Mathematics. Final Report. Urbana: University of Illinois, Department of General Engineering, September 1967. 27p.
ED 021 781. EDRS Price: MF-$0.65; HC-$3.29.

An 8-week summer institute was conducted in 1967 by the University of Illinois College of Engineering to upgrade the professional competence of 24 high school drafting teachers from 15 states and to estimate how many of such a group, after study in this and related programs, could successfully move into teaching technical institute level courses in mechanical technology and machine design. The program consisted of 24 class hours weekly in three courses: applied mathematics for mechanical systems, introduction to design, and seminar in technical education. Courses were paced flexibly since participants' backgrounds were in education with no engineering sciences and limited mathematics. About one third of the enrollees demonstrated enough capability in mathematics that success could be predicted in further study of mathematics or engineering science requiring mathematics. About half handled well the work in advanced production and design dimensioning, and one third clearly showed success in work in graphics and analytical statics, fundamental kinematics, or machine design. The seminar elicited group lament that past education courses had left them with little depth in technical subject matter to be taught. There was collective, enthusiastic endorsement of the institute and recommendations for its continuance and extension into programs of four summers' duration. Appended are the class schedule, publicity materials, and a list of participants.

13. Tennyson, W. Wesley. Pilot Training Project for Teachers of Distribution and Marketing, Focusing on Responsibilities for Career Development. Minneapolis: University of Minnesota, College of Education, December 1967. 95p.
ED 027 383. EDRS Price: MF-$0.65; HC-$3.29.

This pilot training project conducted during the summer of 1967 was Phase II of a two-phase training program. Phase I (ED 016 805) was conducted during the summer of 1966 and provided a group of 30 distributive education teacher-coordinators with distributive occupational experience in two business firms. Phase II was to increase teacher effectiveness in encouraging self-exploration and developing judgment and decision-making skills in students. General approaches followed were (a) consideration of instructional content and methods appropriate to the career development of the distributive education student (b) group experiences designed to focus on the career and personal development of the coordinators and distributive teachers enrolled in the workshop. The instructional program was conducted within a 5-week schedule and consisted of three courses: (a) didactic instruction, 25 class hours; (b) group process, 30 class hours; and (c) integrative seminar, 35 class hours. Fifteen graduating seniors from local schools were selected for the demonstration class. The program was evaluated through studies of behavioral and performance change during the time the teacher was enrolled in the training program, the effect on the career and self-development of the participant in the demonstration class, and the quality of teaching materials that were developed.

14. Kerwood, Robert Vaughn. "Self-Initiated Evaluation of State Teacher Education Programs in Vocational Education." 1967. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106; price: mf $3.00, xerography $9.90; order number 68-8845.
ED 023 900. Not available from EDRS.

To develop an instrument to guide the self-initiated evaluation of a state program of vocational teacher education, three specific objectives were identified and accomplished: (a) to develop criteria and indicators; (b) to validate an instrument; and (c) to analyze, by occupational service area and position, the ratings given by a sample of vocational education personnel. A stratified random sample of state directors, head state supervisors, and head teacher educators of vocational education yielded 316 completed questionnaires. The data were analyzed by occupational service area and position, using the one-way analysis of variance technique. Nine criterion statements with 76 attendance indicators were validated within the following dimensions: (a) planning, (b) coordination among occupational service areas, (c) coordination with the total state program of vocational education, (d) supplying the demand for vocational personnel, (e) occupational competence, (f) accessibility of vocational teacher education, (g) research, (h) instructional materials, and (i) systematic evaluation. The three groups were in agreement on their ratings of seven of the nine criterion statements; significant differences were in the areas of research and instructional materials. The groups were also in agreement on their ratings of 70 of the 76 indicators.

15. Messerschmidt, Dale Harvey. "A Study of Part-Time Instructors in Vocational-Technical Education among Community Colleges in Michigan." Unpublished Doctor's dissertation, Michigan State University, 1967. 135p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106; price: mf $3.00, xerography $6.40; order number 68-4191. ED 025 695. Not available from EDRS.

This study determined the practices used by community colleges in Michigan to recruit, hire, and prepare part-time instructors in vocational-technical education and compared certain attitudes on six selected variables. Administrators of programs at twelve colleges were interviewed and the Minnesota Teacher Attitude Inventory and a personal data sheet administered to 327 instructors employed by the community colleges. Results from the interviews showed, among other things, that local business and industry were the primary source of part-time instructors for community colleges, and that topics which instructors wanted in in-service education included teaching methods, examination item writing, lesson plan preparation, and the philosophy of the community college. Tests of hypotheses concerned with the instructors' attitudes toward students showed that the length of teaching experience and course work in education had an effect on the attitudes of full-time instructors; the age at which part-time and full-time instructors started teaching had no effect on instructors' attitudes toward students.

16. Schaefer, Carl J., and Jacob J. Kaufman, eds. Vocational-Technical Education: A Propectus for Change. Boston: Northeastern University, College of Education, 1967. 171p. ED 042 874. EDRS Price: MF-$0.65; HC-$6.58.

To seek resolution of problems in providing education for youth and adults oriented toward the world of work, the Massachusetts Advisory Council on Education (MACE) undertook a study of vocational-technical education as a major project. This publication contains the major papers and prepared reactions to these papers which were presented at a 42-member conference and constitutes the basis of a report announced as ED 029 107. Major papers were "Vocational and Technical Education --Its Meaning," by C. J. Schaefer; "The Development of Vocational Education in America: An Historical Overview," by V. P. Lannie; "A Behavioral View of Vocational-Technical Education," by J. W. Altman; "Sociological Perspectives and Vocational-Technical Education," by M. B. Sussman; "Decisions for Vocational Education: An Economist's View," by M. J. Bowman; "Manpower Analysis and Vocational Education: Problems and Perspectives," by I. Berg; "Vocation, Education, and Guidance," by R. C. Hummel; "Vocational Education: Is It More Than Education for a Vocation," by B. Shimberg; "The Social Context, Poverty, and Vocational Education," by R. A. Gibboney; "But Readjust We Must--Teacher Education," by E. L. Minelli and T. M. Benton; and a concluding statement by J. J. Kaufman.

17. Strait, Don, and F. E. Hartzler. Principles and Philosophy of Vocational Education. Topeka: Kansas State Board for Vocational Education; Emporia: Kansas State Teachers College, 1967. 113p.
ED 029 953. EDRS Price: MF-$0.65; HC-$3.29.

The principles and philosophy of vocational education are presented in this document in programmed instruction form for use by potential vocational education teachers in teacher preparation courses in colleges or universities. Orientation and basic terminology is included under headings of "The Place of Vocational Education," "Vocational Education Defined," "Types of Vocational Education Students," "Vocational Areas and Services," "Vocational Instruction," "Coordination of Instruction and Work," "Occupational Concept and Vocational Education," and "Review of the Federal Acts." The material was developed by college instructors for individualized instruction and revised after field trial.

18. Courtney, E. Wayne. A Conceptual Basis for Developing Common Curricula in Teacher Education Programs for Occupational Education. Menomonie, Wis.: Stout State University Graduate School, January 1968. 51p.
ED 022 028. EDRS Price: MF-$0.65; HC-$3.29.

This document was to generate a rationale and a design for planning a conceptual basis for developing common curricula in vocational teacher education training programs. A review of the literature discusses heuristic approaches to teacher education, the rational basis for common programs, empirical studies in teacher education, approaches to determine content and behaviors of common programs, and the direction of research in vocational teacher education. The objectives of the proposed research model would be determining the content of professional education needs for teachers of vocational subjects, determining the competency levels required, and extracting the common core of subject matter for professional education needs and training elements to terminally develop a listing of common needs for vocational teachers. The general design of the proposed approach is patterned after previous studies, but is modified to include a population of vocational teachers representing five disciplines, a factor analysis, and an analysis of the data by the analysis of variance--the test statistic is the F statistic, and the critical region for the test of the hypothesis is the theoretical value for indicated degrees of freedom at the 1 percent level of significance.

19. Arnold, Daniel S. Seminar Supervisors and Teacher Educators of Teachers of Persons with Special Needs. Lexington: University of Kentucky, February 1968. 53p.
ED 023 929. EDRS Price: MF-$0.65; HC-$3.29.

Forty supervisors and teacher educators participated in a 2-week seminar which was conducted to develop knowledges about, understandings of, and empathy for persons with special needs. Through lectures, discussions, and other experiences vocational education leaders were acquainted with the implications which persons with special needs present for program

planning and implementation in vocational education. The report outlines the basic content and major activities of the seminar. Certain pertinent topics include the identification of persons with special needs, psychological and sociological characteristics, special characteristics of those from urban and rural areas, the roles of guidance, teacher qualifications, teacher training, vocational education programs for those with special needs, administrative and community roles, employment opportunities, and federal acts and programs affecting those with special needs. Guidelines on characteristics of persons with special needs, teacher education programs, and programs for persons with special needs were developed during the seminar. Appendixes contain evaluation and application forms, copies of a pretest and post test, the guidelines, biographical sketches of the consultants, and a list of participants.

20. Duffett, Walter E. Survey of Vocational Education and Training, 1964-65. Ottawa, Ontario: Dominion Bureau of Statistics, Vocational Training Section, March 1968. 83p.
ED 027 374. EDRS Price: MF-$0.65; HC-$3.29.

Data from monthly and quarterly reports to the director of education are summarized to present an overview of vocational education in Canada as offered by public and private institutions excluding universities. Content includes federal participation in vocational education and a summary of programs in (a) institutes of technology; (b) technical, vocational, and composite high schools; (c) trade schools, vocational center, and occupational courses; (d) apprenticeship training; (e) vocational teacher education; (f) private schools; (g) nursing; and (h) the Labour College of Canada. Questionnaires used to gather the data are included in the appendix.

21. Perlberg, Arye, and others. The Use of Portable Video-Tape Recorders and Micro-Teaching Techniques To Improve Instruction in Vocational-Technical Programs in Illinois: A Pilot Study. Interim Report. March 1968. 24p.
ED 022 029. EDRS Price: MF-$0.65; HC-$3.29.

The two papers in this report are "The Use of Portable Video-Tape Recorders and Micro-Teaching Techniques To Improve Inservice Training in Area Vocational Schools and in the Vocational-Technical Programs of Junior Colleges," and "The Use of Portable Video-Tape Recorders and Micro-Teaching Techniques To Improve Supervision of Prospective Teachers in Vocational-Technical Education." They report a study on the feasibility of using video-tape recordings and micro-teaching techniques to improve the in-service training of teachers and student teachers in vocational-technical programs. Attention was focused on the problems of motivation for change through feedback mechanisms, the elements of systematic analysis, and the development of competency in specific teaching skills. Teachers participating in the project were taped for 10 to 15 minutes during their classes. These tapes were analyzed by the teacher and a project staff member for suggested modifications in teaching techniques. Some implications for consideration in future

project activities were teacher attitudes toward innovation, the availability of portable video recorders, and more effective planning and administration of program activities. It was concluded that these techniques may have a strong appeal to vocational-technical educators for improvement of their teaching skills. Two bibliographies are included.

22. Cade, Dozier C., and Harold E. Davis. National Institute for Public Information Officers in Vocational and Technical Education. Final Report. Atlanta: Georgia State College, May 1968. 130p.
ED 025 632. EDRS Price: MF-$0.65; HC-$3.29.

This institute was held July 10-27, 1967, at the Georgia State College to develop basic principles of communication similar to those used by the private sector of the economy, an understanding of how vocational educators can more effectively work with public news media, packages and kits for use by participants, and to provide inspiration and motivation for informing the public about vocational education. The 42 participants from 28 states and Puerto Rico held positions in public information, research, vocational education coordination, curriculum or program services, consulting, administration, and specialists and state supervisors. Approximately 50 percent of the institute time was devoted to group workshops, 40 percent to lectures on inspiration and motivation. This institute summary contains results of the attitude questionnaire, the knowledge questionnaire, and the job description questionnaire, and a tabular evaluation of the institute. The appendixes contain a roster of the participants, key speeches and papers of the institute, reports of group workshops, four student papers, and some of the subject material discussed in the workshop.

23. U.S. Department of Health, Education and Welfare, Office of Education. Vocational and Technical Education. Annual Report, Fiscal Year 1966. Washington, D.C.: the Office, May 1968. 148p.
ED 025 673. EDRS Price: MF-$0.65; HC-Not available.

This report covers the second year of programs funded under the Vocational Education Act of 1963. Topics covered include (a) "Services for More People," such as full-time postsecondary students, and out-of-school youth and adults; (b) "Enrollments and Programs Surging Ahead," in which it was noted that enrollments increased in six major occupational programs in fiscal year 1966 with only home economics experiencing a decline; (c) "Services Assuring Higher Quality," including teacher training and supervision, program evaluation, special demonstration and experimental programs, and development of state administration and leadership; and (d) "Stronger Administrative Assistance" illustrated by basic tools such as the state plan for vocational education, projected program activities statement, and the annual report. Appendixes present narrative and statistical descriptions of administrative, fiscal, and program development activities. Earlier annual reports are available as ED 019 446 (1964), and ED 025 672 (1965).

24. Allen, David. A Developmental Program for the Improvement of Trade-Technical Teacher Education in the Southern States. Eight Month Follow-Up Study. June 1968. 14p.
ED 022 057. EDRS Price: MF-$0.65; HC-$3.29.

A questionnaire was used to collect data from 13 southern trade and technical teachers in order to ascertain the degree to which they had adopted 15 instructional innovations that had been presented in a special summer workshop 8 months earlier. The innovations were color keyed instruction sheets, a method of illustrating communication barriers, a method of illustrating difficulty of learning, controlled notes, instant evaluation, time lines presentation of history, getting immediate feedback from class, spiral concepts, an elementary research sequence for vocational teachers, group dynamics, achieving level of objectives, film slides and window shades, jigsawed illustrations, four methods of grading, and item anlaysis. Results indicated that the workshop participants were planning to use 30.8 percent and were using 58.5 percent of the innovations. Individual ability to utilize 80 percent of the innovations was also indicated. Innovations used by 10 or more teachers were color keyed instruction sheets, controlled notes, instant evaluation, immediate feedback from class, and film slides and window shades. The full workshop report is available as ED 011 061.

25. Rutgers University. Report of the National Seminar: Vocational Education in Correctional Institutions. New Brunswick, N.J.: Rutgers University, June 1968. 228p.
ED 038 535. EDRS Price: MF-$0.65; HC-$9.87.

A broader vision of the importance of vocational education in correctional institutions was the theme of this 2-week seminar. The substantive focus of the 26 presentations concerned (a) the opportunity and role of vocational education in correctional institutions; (b) the implications of an expanded program of vocational education; (c) available techniques, such as team teaching, remedial reading instruction, cooperative education, and programmed instruction; (d) the influences of culture, the community, and self-concept on inmate behavior; and (e) implementation and improvement of the objectives of correctional institutions. A final report on the seminar is available as ED 038 536.

26. Schaefer, Carl J., and Jacob J. Kaufman. Occupational Education For Massachusetts. A Report Prepared for the Massachusetts Advisory Council on Education. June 1968. 292p.
ED 029 107. EDRS Price: MF-$0.65; HC-$9.87.

A statewide study of vocational and technical education was initiated to evaluate the present system and recommend a master plan for the development, coordination, and expansion of occupational education. Chapters discuss "Key Issues in Occupational Education," "Vocational and Technical Education in Massachusetts and the United States," "The Study Method," "The Adequacy of Vocational Education in Preparing Youth for Employment," "Occupational Education in the Private Sector," "The Image of Vocational Education," "Teacher Education," "Financing of Education in Massachusetts," "Educational Media and Vocational-Technical Education," "Occupational Education in Massachusetts' Regional

Community Colleges," "The Economy and Occupational Requirements of Massachusetts," and "Recommendations." Recommendations were advanced for improvement in vocational education in areas of curriculum, comprehensive high schools, organization, institutes for educational development, administration, teacher education, public support, community colleges, financing, and legislation. The appendixes contain the meetings, conferences, and schools visited, and tables of supporting data.

27. University of Nebraska. Seminar for Preparation of Professional Personnel for Vocational-Technical Education, A National Seminar for College Deans. Interim Report. Lincoln: the University, June 1968. 140p.
ED 026 968. EDRS Price: MF-$0.65; HC-$3.29.

Problems related to the preparation, supply, and demand of vocational education personnel were discussed at a seminar by 75 persons representing state directors of vocational education, vocational teachers, staff members of USOE, and deans of colleges responsible for vocational personnel preparation from 41 states and the District of Columbia. Participants were invited to consider changes in national employment programs affecting vocational personnel requirements, to identify new concepts for vocational educator preparation at colleges and universities, and to develop innovative strategies for effective implementation of legislation regarding vocational education. The report includes recommendations submitted by five task force groups on administrative organization for effective development of professional personnel; strategies to meet common program goals; techniques for effective selection and recruitment of personnel; and the implications for program development, research, and evaluation of the Education Professions Development Act and other federal programs. Also included are the seven major presentations, the seminar agenda, an evaluation of participant reaction to the seminar, and lists of seminar staff, participants, and problems identified by group discussion groups.

28. Kaiser, Charles H. An Empirical Analysis of Role Conflict and Multiple Allegiance among Selected Vocational Teachers in Oklahoma. Final Report. Stillwater: Oklahoma State University, July 1968. 165p.
ED 022 053. EDRS Price: MF-$0.65; HC-$6.58.

Role theory concepts were employed to define substantive areas of interactions between vocational teachers, state supervisory personnel, and local school administrators; define potential and actual role conflicts for vocational teachers arising from these interactions; and assess the impact of perceived conflict upon vocational teacher job satisfaction. Interviews of 20 vocational agricultural teachers, 20 trade and industrial teachers, 40 school administrators, and 10 state supervisors were conducted from a stratified random sample of 30 high schools. Findings indicated (a) school administrators and state supervisors differed in their evaluation of vocational agriculture teacher behavior more than their evaluation of trade and industrial teacher behavior, (b) vocational agriculture teachers and their administrators differed more in

perception of role behavior than trade and industrial teachers and their administrators, (c) state supervisors and trade and industrial teachers differed in evaluating teacher role more than state supervisors and vocational agriculture teachers, and (d) state supervisory personnel in general held rigorous expectations for vocational teacher behavior. The greatest potential area of role conflict was in differing expectations of teaching behavior by state supervisors and school administrators.

29. Ryan, T. A. Summer Institute To Prepare Vocational Educators in Curriculum Development. Corvallis: Oregon State University, July 1968. 231p.
ED 023 860. EDRS Price: MF-$0.65; HC-$9.87.

A 4- week institute to prepare vocational educators in leadership positions for a change agent role in vocational education curriculum development was held on the Oregon State University campus from June 19 to July 4, 1967. A broadbased approach to the curriculum process was used, implementing an organic curriculum concept and behavioral definition of objectives in a systems approach to curriculum development. Major objectives were to develop greater understandings of curriculum theory and design, increase familiarity with innovative programs and practices, and develop proficiency in using techniques and strategies of a decision model of curriculum development. An enrollment of 30 participants was selected from 130 applicants. The program included presentations by the resident faculty, visiting lecturers, assigned readings, field trips, reaction groups, question and answer sessions, and discussion groups. A task force project developed a guide to vocational education curriculum development. The state director of vocational education and his professional staff participated in program planning, staffing, and operation. Post-institute evaluation indicated achievement of objectives.

30. Pierce, Robert Benjamin. "An Analysis of the Impact of the Vocational Education Act of 1963 on Business Education in the Public Secondary Schools of Missouri with Implications for Teacher Education." Unpublished Doctor's dissertation, University of Iowa, August 1968. 187p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 69-8790.
ED 055 212. Not available from EDRS.

This study was to determine the degree of impact exerted by the Vocational Education Act of 1963 on business education in the public secondary schools of Missouri. The study encompassed an examination of the historical background of federal governement participation in business education at the public secondary school level throughout the nation and the state of Missouri. The provisions of the 1963 Act and the Missouri State Plan for Vocational Education applicable to business and office education were examined. Additional data regarding educational programs were obtained from the files of the state department of education and from a questionnaire which was submitted to all teachers with valid certificates. Based upon data collected and subsequent analysis and

findings, conclusions include (a) Vocational business and office education has been given increased recognition by the Missouri State Department of Education; (b) Vocational business and office instructional personnel have been motivated by certification requirements to obtain academic preparation in the form of professional vocational courses; and (c) A larger percentage of school districts were offering vocational business courses than were doing so prior to the passage of the Act.

31. Schrag, Adele F. Data Processing Education in the Schools of Pennsylvania, 1967-1968. Philadelphia: Temple University, Department of Business Education, August 1968. 126p. ED 034 018. EDRS Price: MF-$0.65; HC-$6.58.

All Pennsylvania high schools, vocational-technical schools, community colleges, and 2-year extensions of Pennsylvania University were studied to determine what data processing content was being taught in the schools and to assess whether a need existed to train teachers of data processing or to improve the training of those now involved in teaching classes. The first questionnaire was used to gather data about types of courses, availability of computers for students' use, and name of instructor. A total of 582 questionnaires (81 percent) was returned. The second questionnaire was used to secure course content, objectives, and actual utilization of equipment, and 151 of 153 forms (98 percent) were returned. The conclusions and seven recommendations based on the conclusions are given.

32. Sidney, Howard. Methods of Teaching Agricultural Occupations in Community Colleges and Area Vocational Schools. Final Report. Cobleskill: State University of New York, Agricultural and Technical College, August 1968. 91p. ED 026 529. EDRS Price: MF-$0.65; HC-$3.29.

Twelve 3-day regional seminars were held from November 13, 1967 to June 14, 1968 to assist educators at the post-high school level to (a) determine the need for agricultural programs; (b) plan and develop curriculum; (c) investigate supervised occupational experiences; (d) assist in the development of leadership characteristics; (e) evaluate facilities for instruction; (f) help train faculty for vocational-technical programs; (g) communicate with administrators, high school teachers, 4-year college faculty, and the general public; and (h) provide guidelines for agricultural-technical programs. The seminars were attended by 435 state supervisors of agriculture, teacher educators, state directors, and personnel in post-secondary agricultural institutions from 44 states and Washington, D.C. Some general conclusions were The public is demanding supervised occupational experience for students enrolled in vocational-technical education; Students are receiving better education at the high school level; There is a trend in post-high school curriculums for cooperation among the various vocational services; There is increasing need for agricultural management ability; and Areas served by community colleges should be large enough to support sound technical programs.

33. Wenrich, Ralph C., and others. A State Program for the Development of Persons for Leadership Roles in the Administration of Local Programs of Vocational and Technical Education. Final Report. Ann Arbor: University of Michigan, Division of Vocational and Technical Education, August 1968. 83p.
ED 026 523. EDRS Price: MF-$0.65; HC-$3.29.

The vocational education leadership behavior of graduates from an 8-week summer workshop who completed a year-long internship was observed to evaluate the training program and to develop an objective formula for selection of personnel for effective leadership roles. The 71 graduates for the school years 1964-67 were compared with the 48 member control group which consisted of men interviewed but not selected for training. The leadership scores obtained indicated that the trained groups improved at a greater rate on the leadership variables measured than the control groups. It was impossible to separate the effects of training from the effects of selection when accounting for this improvement in leadership behavior. A prediction equation was developed which accounted for 25 percent of the variation in the leadership behavior measured. Some study highlights were An objective and quantitiative measure of leadership behavior was obtained; The selection procedure and training program accounted for impressive gains in leadership behavior; and The combination of the 8-week summer workshop and the year-long internship was superior to the internship alone.

34. Prull, Richard W., and Philip S. Very. A Description and Evaluation of Vocational Teacher Training Programs in the State of Rhode Island. Providence: Rhode Island Occupational Research and Development Coordinating Unit, September 1968. 52p.
ED 025 650. EDRS Price: MF-$0.65; HC-$3.29.

To evaluate undergraduate vocational teacher preparation programs in the Rhode Island, the 117 vocational educational graduates of the four institutions were surveyed to determine their opinions concerning their college experience. Responses from 66 graduates indicated that (a) state needs are being fulfilled in vocational business teacher education, with the exception of the lack of training in distributive business education; (b) agriculture teacher education supplies students with all necessary knowledge and skills in production agriculture; however, additional emphasis is needed in non-farming businesses, conservation, and food processing; (c) home economics teacher education produces a sufficient number of well-trained teachers; (d) trade and industrial teacher education has not kept pace with development of industry and technology and needs progressive change in order to compete with other states; and (e) actual practical experience in a teacher's occupational field would help him to be a better teacher.

35. Krogstad, Roland J., and Donald M. Brill. Departmental Research Center for the State Board of Vocational, Technical and Adult Education. Final Report. Madison: Wisconsin State Board of Vocational, Technical, and Adult Education, October 1968. 32p.

ED 024 840. EDRS Price: MF-$0.65; HC-$3.29.

The Department Research Center (RCU) of the Wisconsin Board of Vocational, Technical and Adult Education was approved to begin January 3, 1966 and continues operation under a contract and an extension to September 30, 1968. The general objectives of the unit were stimulation, coordination, and dissemination of research in vocational and technical education within Wisconsin. Major issues and problems were identified and given priorities for detailed study. These included teacher education and leadership development; the follow-up procedures; organization and administration of newly formed area vocational, technical, and adult education districts; present and emerging occupations; information for program planning and development; and long-range planning. Over 300 surveys and projects were completed or commenced operation during the report period. During the final six months of operation, field support was accomplished in 15 of the 18 area vocational, technical, and adult education districts. This organizational structure completes the line of communication and research information dissemination from the federal level through the state down to the district and local school level.

36. Law, Gordon F. "Research Visibility. Vocational Education for Girls and Women," American Vocational Journal, 43:16; October 1968.
ED 022 063. EDRS Price: MF-$0.65; HC-$3.29.

Reviews of 17 studies relating to female vocational education are organized by topics: (a) "New Directions in Business Education" reports a program for scientific secretaries, the effects of interval pacing on typing skills, a task analysis of an office occupation cluster, and a 4-week preservice institute for office education teachers; (b) "Home Economics: In School and Community" describes an evaluation study of 12 pilot wage earning home economics classes, a film on homemaker service, and a 6-week child development summer institute for selected home economics teachers; (c) "Food Service Occupations" treats a national survey of nonbaccalaureate commercial food programs and an instructional materials development project for food service occupations; (d) "Career Opportunities in Health Services" reports a survey of practical nurses in Illinois, a study of programs for biomedical equipment technology, a workshop for practical nursing teachers, guidelines for program planning in health technology, and curriculums for medical record technicians and teachers of medical lab assistant programs; (e) "Career Patterns for Women" reviews a project and a bibliography on this topic. "Plain Talk," a continuing column, provides evaluative comments on the items reviewed. The bibliography lists 12 related studies which are in progress.

37. National Science Foundation. Junior College Teachers of Science, Engineering, and Technology, 1967: Experience and Employment Characteristics. Washington, D.C.: the Foundation, October 1968. 98p.
ED 028 768. EDRS Price: MF-$0.65; HC-Not available.

This study proposed to determine qualifications and teaching loads of junior college teachers of natural and social sciences, engineering, and technology; to examine the courses to identify needed improvements; and to determine the status of the profession according to the teacher's experience and his commitment to the junior college. Although 4663 questionnaires were sent, it was found that only 3920 recipients filled all the conditions of the survey. There were 2540 usable responses. Among the findings were (a) 85 percent of the teachers were men, (b) the median age was 42, (c) 91 percent taught full time, (d) 15 percent of the full-time and 20 percent of the part-time teachers were women (e) part-time teachers were slightly over the median age, (f) California and Florida had the highest ratio of teachers to population, (g) 84 percent taught in the public colleges. The questionnaire, technical notes, and details of the survey are shown in the appendix, e.g., age and sex by geographic region and state, enrollment size, degrees earned, teaching experience, number of courses taught by field and degree, professional affiliations, length of current appointment, administrative and research duties, current work on higher degrees, outside employment, textbook appraisal, salaries, appraisal of success, degree of satisfaction, career aims, and various other correlations.

38. Advisory Council on Vocational Education. Vocational Education: The Bridge Between Man and His Work. General Report. Washington, D.C.: the Council, November 1968. 248p. ED 028 267. EDRS Price: MF-$0.65; HC-Not available.

Under the provisions of the Vocational Education Act of 1963, the Advisory Council on Vocational Education was directed to review the administration and status of vocational education programs. Highlights, recommendations, issues, and problems of vocational education within the national context of changing social, educational, and economic conditions are reported. The report contains sections relating to (a) the Panel of Consultants on Vocational Education and the Vocational Education Act of 1963, (b) Growth and Development of Vocational Education, (c) Financing Vocational Education, (d) Administration of Vocational Education, (e) Research in Vocational Education, (f) Teacher Education, (g) Vocational Guidance, (i) Supporting Services, (j) Review of Comtemporary Local Programs, (k) Achievements and Limitations, (l) Social and Manpower Environments of Vocational Education, (m) Innovations and New Directions, (n) Legislative Recommendations; and (o) Administrative Recommendations. Highlights of this report, as presented in a report of the advisory council to the U.S. Congress, were announced as ED 021 151.

39. Indiana Research and Development Coordinating Unit for Vocational and Technical Education. Vocational Guidance Seminar. A Report of a Summer Project for Administrators, Counselors, and Teachers. Terre Haute: the Unit, November 1968. 172p. ED 029 972. EDRS Price: MF-$0.65; HC-Not available.

Four regional workshops in vocational guidance were designed to inform and update school counselors, teachers, and administrators concerning the working conditions, requirements, and opportunities in business,

industry and the service occupations for certain industrial areas in Evansville, Hammond, New Albany, and Wabash, Indiana. Each seminar consisted of a 3-week intensive course in which business, industries, and various services were visited and discussions were held with management personnel directors, and on-the-job personnel. The specific objectives included helping counselors more fully understand the relationship between the school curriculum and vocational opportunities in the community; acquainting counselors with occupational information materials; and preparing school counselors to relate understandings of vocational offerings and vocational opportunities to students--thereby providing sound vocational counseling.

40. Rice, Dick C. Professional Personnel in State Divisions of Vocational Education: Policies, Practices, Requirements. Columbus: Ohio State University, Center for Vocational and Technical Education, November 1968. 100p.
ED 023 928. EDRS Price: MF-$0.65; HC-$3.29.

To depict the current status of vocational education state leadership personnel in terms of policies, numbers, education, and experience, a five-part questionnaire was utilized in 31 states to (a) determine the existence and content of professional personnel policies and their effects on the operation of state divisions of vocational education, (b) identify the training and experience qualifications of present state division professional staff members, and (c) ascertain training and experience needs of state division personnel. Satisfactory written policies existed in most states for personnel selection, recruitment, dismissal, retirement, tenure, in-service training, and evaluation. More adequate policies on salary and professional leave are needed in about one-half of the states. Strategies found to be successful in retraining capable personnel were salary increases, opportunities for further education, and promotions. Nearly all states had policies which specify experience requirements. Educational requirements for 73 percent of the 562 positions stipulated a master's degree. A 32 percent growth is anticipated from 1965 to 1970. Some recommendations were that comparative salary schedules be developed and recruitment bases be broadened and that work experience requirements be discontinued for some positions.

41. Arnold, Daniel S., and Carol Van Tassel. Seminar for Supervisors and Teacher Educators of Teachers of Persons with Special Needs. Final Report, Phase II. Lexington: University of Kentucky, December 1968. 44p.
ED 044 394. EDRS Price: MF-$0.65; HC-$3.29.

This report describes the evaluation phase of a 2-week seminar held at the University of Kentucky on June 12-23, 1967 and designed for supervisors and teacher educators of teachers of persons with special needs. The general objective of the seminar was to orient persons in leadership positions in vocational education to the characteristics, problems, and educational needs of persons with special needs. The report includes a description of the evaluation findings and a section containing

the conclusions. Five evaluation activities were involved including pretest, posttest, daily guideline reports, individual projects, participant evaluation questionnaires, and a detailed follow-up survey. On the basis of the evaluation, it was concluded that the participants benefited professionally from having attended the seminar, and that the outcomes justified the time and effort expended by the seminar staff and the host institution.

42. Perlberg, A., and others. Preparation of Teachers for Vocational-Technical Schools in Israel. Final Report. Haifa, Israel: Technion-Israel Institute of Technology, December 1968. 112p. ED 026 543. EDRS Price: MF-$0.65; HC-$6.58.

This study attempts to solve the problem of Israel's shortage of qualified teachers for vocational and technical schools by analyzing the problems contained in their preparation and by suggesting an appropriate program of studies for them, along with recommendations for its effective use. Analysis of the general as well as the vocational and technical educational system in Israel provides a basis for an evaluation of the teacher preparation for vocational and technical education in that country. The problems in Israel of vocational teachers' certification requirements, the status of vocational education, and the sources and recruitment of vocational and technical teachers, are considered in the program that is recommended for technical teachers in engineering and related subjects in electronics and mechanical engineering. Specific recommendations include a need to raise the status of the vocational teacher, to stress scientific and technical subject matter mastery, and to offer occupational experience along with professional education preparation.

43. Ellis, Willie Thomas, Sr. "The Adoption of Educational Innovations Among Experienced Teachers of Vocational Agriculture in Predominantly Negro Schools in North Carolina." Unpublished Doctor's dissertation, Cornell University, 1968. 177p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 69-5016.
ED 055 180. Not available from EDRS.

To determine how teacher educators and state supervisors in vocational agriculture can improve planned behavioral change among teachers, 115 agriculture teachers with at least 3 years of experience in Negro schools were interviewed. Spearman's rank correlation, multiple correlation, and step-wise regression were used to analyze the data. The findings show that teachers varied according to adopter categories on 12 independent variables. Although they were not consistently significant, patterned trends were apparent. The study concluded that teacher educators and supervisors can be more effective in the implementation of behavioral change among teachers by identifying and articulating opinion leaders and the sources of information used by agriculture teachers in the adoption of educational innovations.

44. Hutchings, Donald, ed. Education for Industry: Symposium on the Integration of Further Education and Industrial Training. London, England: Longman's, Green and Co., 1968. 130p. ED 042 132. Not available from EDRS.

Problems in the relationship between education and training in Great Britain are discussed by specialists in both fields. It is urged that industrial education be seen on a phase of adult education. The uniqueness of the British system under the Industrial Training Act is discussed (its vertical organization, promotional ladder approach, and the placing of responsibility on the employer) and the possible pressure it may put on educational institutions. The need for a rethinking of the whole structure of secondary education as it prepares the young worker and of his need for further training on the job is next discussed. Then follow chapters on problems of special groups --the unskilled, women, and the older worker. The supply, education, and training of technical teachers and industrial training officers is considered. Improvement of the quality of teachers and of the courses they teach is seen as the best way to a more fruitful integration of secondary education, further education, and industrial training. The book concludes with a discussion of information resources for the trainer, such as the "Training Abstracts Service" of the Ministry of Labor, professional journals, and library services.

45. Lacy, Annell. "An Analysis of Factors that Affect Job Satisfaction of Public High School Business Teachers in Ohio." Unpublished Doctor's dissertation, Ohio State University, 1968. 252p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 69-1160.
ED 055 193. Not available from EDRS.

This study was to determine whether selected factors affect the job satisfaction of business teachers in public high schools in Ohio and whether teachers in Ohio's block-time programs are more satisfied with their jobs than teachers in traditional business education programs. To gather needed data, a three-part questionnaire was developed and sent to a sample of Ohio business education teachers. Part I of the questionnaire incorporated nine questions which sought to determine general job satisfaction. Part II contained 40 questions aimed at teachers' attitudes toward their schools and communities, and personal factors that relate to job satisfaction. Part III included 20 questions pertaining to factual data about the teachers, their schools, and the communities in which they live and teach. Based on analysis of the data, selected conclusions were (a) the community affects teacher job sastisfaction; (b) fringe benefits are important; (c) school administrators affect teacher job satisfaction; and (d) teacher job satisfaction is affected by salary. A major recommendation is that teacher educators should provide time in the business education curriculum for human relation courses.

46. Kelly, M. Frances. Professional Development Project for Two-Year College Vocational and Technical Faculty. Buffalo: State University of New York, Department of Higher Education, 1968. 153p.
ED 029 133. EDRS Price: MF-$0.65; HC-$3.29.

The objective of this project was the development of a model designed to expose the new community college faculty member to the essential components of community college teaching. Specifically the objectives were to aid an individual to be aware of himself as a teacher and as a participant in the 2-year college environment as well as in the larger community, to identify the various roles of faculty members, and to ease the transition of the individual from his former work role to the role of faculty member in a community college. The content of the model was developed around these three general areas of concern, and was generated by utilizing both recently employed 2-year faculty and veteran faculty as consultants. They assumed major responsibility for the focus and specificity of the content. It is characteristic of this model that while the content is structured and was identified by consensus, the technique by which content is to be presented is left to the discretion of the individual leader.

47. Asbell, Bernard. Education and the Real World of Jobs. Washington, D.C.: National Committee for the Support of the Public Schools [1968]. 85p.
ED 029 990. EDRS Price: MF-$0.65; HC-$3.29.

This document focuses on five major themes (a) What's Right and What's Wrong with Vocational Education; (b) Technology for Elementary School Children; (c) Setting Performance Objectives for Learning; (d) A Practical Program for "Real" Learning, and (e) Vocational Guidance: An Unfulfilled Challenge. It is recommended that vocational education needs to renew itself according to the following priorities (a) implementing the chief recommendations of the 1963 panel of consultants on vocational education; (b) presenting a realistic picture of the world of work in elementary schools; and (c) shifting an emphasis from "teaching," in which a dominant adult makes a series of external demands upon children for externally desired responses, to "learning," in which a student interacts directly and intimately with things and people and learns to generalize from these experiences; and (d) developing a whole new curriculum which emphasizes attainment through performance objectives.

48. Black, Fred P., Jr. Attitude Changes of Vocational Educators After Attending a Three-Week Workshop in Vocational-Technical Education Research. Cheyenne: Wyoming State Department of Education, Research Coordinating Unit in Vocational-Technical Education, January 1969. 29p.
ED 027 431. EDRS Price: MF-$0.65; HC-$3.29.

To evaluate changes of attitude by vocational educators during a summer workshop in education research, statistical data were obtained from a sample of four school administrators and 12 vocational education

teachers who attended the workshop. Chi-square analysis and Z test were utilized in evaluating attitude changes based on a pre- and posttest. Some findings were (a) A chi-square analysis revealed little significant difference between the pre-test mean score and the posttest mean score; (b) Vocational educators had a favorable outlook on the role of research in their field following the workshop.

49. Hensel, James W., and Garry R. Bice. Annual National Vocational-Technical Teacher Education Seminar. Columbus: Ohio State University, Center for Vocational and Technical Education, January 1969. 170p.
ED 027 424. EDRS Price: MF-$0.65; HC-$6.58.

This seminar was held to focus the attention of personnel in vocational education leadership positions on two major problems critical to further development and improvement of teacher education, with 215 participants from 43 states and the District of Columbia registering. Problem areas of teacher education for differentiated staffing and for teaching the disadvantaged were the topics for intensive study. Position papers were developed for presentations by two task forces in the problem areas. Major presentations were "Educational Personnel Development Agency and Vocational Education," by D. Davies; "Vocational Teacher Education: Concerns, Concepts, and Commitments," by R. E. Taylor; "A Challenge for Action," by R. Evans; "Differentiated Staffing for Vocational-Technical Education," by D. Allen and P. Wagschal; and "Vocational-Technical Education for the Disadvantaged," by E. W. Gordon. Reactions of task force members to the presentation and summaries of the work of committees are included. Some supplementary items include a partial bibliography for teacher education of teachers for the disadvantaged, guidelines and plans for the seminar, the seminar program, an evening film program, summary of evaluations by participants, a listing of the seminar staff, and a list of seminar participants.

50. Tuttle, Francis. Summer Institutes To Train Data Processing Teachers for the New Oklahoma State-Wide Computer Science System, Phase II. Final Report. Stillwater: Oklahoma State Board of Vocational Education, Division of Technical Education, January 1969. 37p.
ED 027 419. EDRS Price: MF-$0.65; HC-$3.29.

Twenty-three instructors participated in an 8-week summer institute to develop their technical competency to teach the second year of a 2-year Technical Education Computer Science Program. Instructional material covered the following areas: (a) compiler languages and systems design, (b) cost studies, (c) business organization, (d) advanced programming, and (e) operating systems. In evaluating the results of the institute, the Programmer's Aptitude Test by the Psychological Corporation in New York was given at the beginning to establish each participant's aptitude in areas of numeric, verbal, and abstract reasoning relevant to programming. In addition, pretest and posttest scores were determined in the following areas: (a) business organization, (b) cost accounting, (c) systems, (d) COBOL, and (e) FORTRAN. Class schedules, textbooks, and a teacher-participant evaluation are included. Success of the

institute led to the following conclusions: Competent data processing and computer programming instructors, including teachers from other disciplines, can be trained in two summer institutes. Their success can be predicted from aptitude tests. Periodic followup instruction to teachers is recommended. Phase I of this study is described in ED 016 066.

51. Godfrey, Eleanor P., and others. Vocational Programs in the Public Schools: The Role of the Teacher. Final Report. Washington, D.C.: Bureau of Social Science Research, February 1969. 261p.
ED 027 414. EDRS Price: MF-$0.65; HC-$9.87.

To compare the backgrounds, training, and degree of satisfaction with teaching of secondary and post-secondary academic and vocational teachers, and to obtain the opinions of the teachers and their colleagues in administration and guidance about some important educational issues, a stratified random sample was selected of 180 of the larger public school districts. A post-secondary institution was paired with each secondary school selected, resulting in a sample of 11,649 administrators, counselors, and teachers. Some major findings were that (a) vocational teachers worked longer hours with fewer students than academic teachers; (b) changes recommended by teachers were a broad, general education in the high school, a narrower focus on job-related studies in the post-secondary vocational and technical programs, and greater emphasis on mathematics and humanities in the junior college transfer programs; (c) a majority favored more intensive vocational guidance and training in junior high school and more part-time student employment; (d) most teachers recommended a single post-secondary institution embracing both academic and vocational programs; and (e) most respondents felt a combination high school program was feasible for all students if unnecessary requirements were eliminated.

52. Johnson, G. Orville. Interdisciplinary Workshop for Special Education and Vocational Education Teachers. Final Report. Columbus: Ohio State University, Center for Vocational and Technical Education, February 1969. 21p.
ED 928 304. EDRS Price: MF-$0.65; HC-$3.29.

The purposes of the workshop were (a) to provide a means by which professionally trained educators in special education and vocational education could work as a team in designing local school programs for educable mentally retarded students; (b) to create favorable attitudes in special education and vocational education teachers toward combined educational services for educable mentally retarded students; and (c) to develop guidelines and materials that could be used in organizing and implementing combined programs. The general content of the sections conducted by the specialists in mental retardation included general home and environmental background, learning characteristics, adjustment and behavior, physical and motor abilities, general education achievement, and vocational and community adjustment. The vocational education specialists discussed such topics as the objectives

of vocational education, distributive education, content areas, selection of students, skills taught and knowledges required, and expected outcomes.

53. Popham, W. James. "Validation Results: Performance Tests of Teaching Proficiency in Vocational Education." Paper presented at the American Educational Research Association annual meeting, February 5-8, 1969, Los Angeles. 22p. ED 027 260. EDRS Price: MF-$0.65; HC-$3.29.

A project was undertaken to develop and validate a method of assessing teacher competence through the use of pupil performance tests. Teachers were given a list of specific, operationally defined objectives for a particular topic and directed to teach the objectives. Teacher competence was judged in relationship to the way their students performed on pre- and posttests of behaviors stated in the objectives. An attempt to validate this method of measuring teacher effectiveness involved contrasting the results produced by experienced teachers and nonteachers (28 pairs teaching a 10-hour auto mechanics units and 16 pairs teaching a 10-hour electronics unit to high school industrial arts classes). Calculations of mean and standard deviation, internal consistency coefficients, intercorrelations between a number of variables, and analyses of covariance between pupil scores and interest revealed no significant differences between the teachers and nonteachers. Results (which confirmed those of an earlier study using social science classes) were interpreted as indicating that the experienced teacher is not more experienced than the nonteacher in modifying learner behavior in terms of previously established instructional objectives. Findings do not, however, refute the basic assumption that performance test measures are presently the most serviceable legitimate indices of teaching proficiency.

54. National Committee on Employment of Youth. Papers Presented at the National Workshop on Vocational Education for the Disadvantaged. (Atlantic City, N. J., March 12-14, 1969). New York: the Committee, March 1969. 117p. ED 030 742. EDRS Price: MF-$0.65; HC-$3.29.

Presentations included in this collection are "Vocational Education for the Disadvantaged: Lessons from Government Funded Programs," by Garth L. Mangum; "Curriculum Adaptations," by Frances S. McDonough; "Case Study: Newark Manpower Training Skills Center," by George R. Quarles; "The Development of Vocational Education Teachers of the Disadvantaged," by Lawrence Reddick; "Counseling and Supportive Services in Vocational Education for the Disadvantaged," by Richard Greenfield; "Perspectives on the Workshop," by Martin Hamburger; "Curriculum Implications for an Educational System that Meets the Needs of Disadvantaged Students," by Jerry C. Olson; "Turning Vocational Education to the Disadvantaged: Working With the Employers and Unions," by Robert Schrank and Susan Stein; "Involving the Community in Vocational Education for the Disadvantaged," by Dan Dewees and Lester Wooten; "Vocational Education for the Disadvantaged: Lessons from Ford Foundation Funded Program," by Martin J. Feldman; "Review of Case

Presentation Materials and Techniques," by Louis Ramundo and Michael R. Robinson; and "Vocational Education for the Disadvantaged: Planning, Organizing and Operating Through a Systems Approach," by Cleveland L. Dennard.

55. Brandon, George L., ed. "Research Visibility: Preparation of Professional Personnel for Vocational Education," American Vocational Journal, 44:16; April 1969. 16p.
ED 029 970. EDRS Price: MF-$0.65; HC-$3.29.

Sixteen reviews in this issue pertain to the preparation of professional personnel for vocational education. Topics under "Seminars and Workshops" include implementing the project method in distributive education, an off-farm agriculture workshop, innovative technical teacher education programs, a national vocational teacher education seminar, and vocational teacher education in small colleges. "Leadership Training" reviews training institutes conducted for technical and agricultural education. "Teacher Education" reports cover trade and industrial teacher education and certification, a proposed design for professional teacher education, the demand and selected sources for vocational teachers, and enlisted men as potential sources of vocational teachers. "Other Studies" concerns policies, practices and requirements of vocational state department personnel; trade and technical leaders in California; staffing; and the competencies of vocational plant facilities specialists. "Plain Talk," a continuing column by the author, makes a plea for coordinated efforts in research dissemination and a time reduction between federal authorization and actual appropriations. A bibliography lists 35 related publications.

56. Nelson, Hilding E. A Study To Determine the Feasibility of Establishing a Master's Degree Program for Preparing Vocational Instructional Specialists in Pennsylvania. University Park: Pennsylvania State University, Department of Vocational Education, April 1969. 43p.
ED 047 541. EDRS Price: MF-$0.65; HC-$3.29.

The feasibility of the proposed program for preparing local school instruction coordinators was related to the following criteria, all of which were defined in quantitative terms: Instructional leadership is deficient or needed; School are willing to employ instructional coordinators with a primary responsibility for providing instructional leadership; There appears to be sufficient potential population for recruitment to the training program; and Schools are willing to cooperate in fieldwork programs. Sixty six vocational directors were surveyed. Replied were received from 86 percent of the educational institutions including 54 area vocational-technical schools and three comprehensive high schools. By and large, all criteria except the one relating to employability of graduates were satisfied. It was therefore recommended that the initiation of the program be delayed one year pending clarification of employability status and investigation of the possibility of recruiting into the program persons already employed as instructional specialists. In the interim, efforts were to be expended on program development. The initial chapter presents a program prospectus.

57. Pratzner, Frank C., and Marjory Hanson. The Relative Effectiveness of Two Ways of Structuring and Presenting Pre-Service and Initial In-Service Vocational-Industrial Teacher Education Lessons. Minneapolis: Minnesota Research Coordinating Unit in Occupational Education, April 1969. 20p.
ED 029 995. EDRS Price: MF-$0.65; HC-$3.29.

The relative effectiveness of two ways of structuring and presenting 24 clock hours of preservice and initial in-service vocational-industrial teacher education lessons was determined by comparing an integrated lecture-discussion course presented by qualified vocational-industrial teacher educators with a packaged course consisting of 16mm sound film presentations followed by group discussions (with related guides and materials). The sample of 30 prospective teachers was randomly enrolled in either a summer or fall section of the course, which subsequently was divided into experimental and control groups. Several statistical analyses were applied to the data. While subjects in the film-discussion groups showed consistent and statistically superior performance on the criterion tests, these differences were not reported as being educationally significant. However, the film-discussion appears to be a more efficient method of instruction since it provides for consistency of presentation with a degree of adaptability and flexibility in discussion and has probable economic and convenience advantages.

58. Brandon, George L., ed. "Research Visibility: Evaluation and Accreditation," American Vocational Journal, 44:33-39; May 1969.
ED 029 155. EDRS Price: MF-$0.65; HC-$3.29.

Eleven reviews in this issue pertain to evaluation and accreditation. They are organized under these topics: (a) "Cost Analysis" presents review and synthesis information on the economics of vocational education and a research attempt to cost analyze 32 schools; (b) "Follow-Up Studies" summarizes half of a national survey in secondary trade and industrial education which sought comparative data for vocational and academic graduates; (c) "Behavioral Analysis" reports a development and evaluation project for self-instructional methods in trade and industrial education; and (d) "Other Studies" includes two papers and a book chapter on program evaluation, an MDTA program evaluation report, a guidance program evaluation report, a teacher education program evaluation report, and standards and evaluative criteria for post secondary schools. "Plain Talk," a continuing column by the author, discusses economic evaluation, accreditation evaluation, and self-evaluation, as well as priorities and directions which have recently come out of the U.S. Office of Education. The bibliography lists 39 additional items on the above topics.

59. Maley, Donald. The Cluster Concept Program as an Approach to Vocational Education at the Secondary School Level. College Park: University of Maryland, Department of Industrial Education, May 1969. 41p.
ED 054 378. EDRS Price: MF-$0.65; HC-$3.29.

This paper is a discussion of a 4-year research and development project dealing with the cluster concept approach to vocational education. The concept is a form of vocational education that prepares the individual to enter into gainful employment in a number of occupations which have sufficient commonalities in human requirements and kinds of work to permit a high degree of mobility within the cluster. Its principal mission was to provide job entry skills and second level skills in a series of related areas. This movement was prompted by the increasing mobility of people, the need for mobility within an industry, the need to adapt to technological changes, and the problem of selecting one's life work. The first phase of the project was devoted to a number of probes and developments, the second phase to teacher education and the preparation of curriculum materials, the third to implementation, and further development through field testing and evaluation at the secondary level, and the fourth to implementation and development through testing and evaluation including placement and followup of subjects.

60. U.S. Department of Health, Education and Welfare, Office of Education. Vocational and Technical Education. Annual Report. Fiscal Year 1967. Washington, D.C.: the Office, May 1969. 174p.
ED 033 240. EDRS Price: MF-$0.65; HC-Not available.

This report covers the third year in which vocational programs and related activities were supported by the Vocational Education Act of 1963. A program overview presents vocational education, with a fiscal 1967 enrollment of 7,047,501 persons, as the largest component in the nation's array of organized efforts to reduce unemployment and eliminate occupational shortages. Vocational education served almost one million more persons in 1967 than in 1966. Every occupational area showed an increase in total enrollment. Approximately 95 percent of those completing vocational programs and available for placement found employment. Ancillary services were supported as essential elements to the further development of vocational education. Efforts in the areas of program management, planning, and budgeting indicate a trend toward closer coordination and control of vocational education programs. Appendixes include 77 tables describing administrative, fiscal, and program development activities. Annual reports for 1964, 1965, and 1966 are available as ED 019 466, ED 025 672, and ED 025 673 respectively.

61. Dillion, Roy D., and James T. Horner. Seminar for Preparation of Professional Personnel for Vocational-Technical Education. Final Report. Lincoln: University of Nebraska, June 1969. 161p.
ED 039 763. EDRS Price: MF-$0.65; HC-$6,58.

Seminar participants included college administrative officers, state vocational education directors, vocational-technical teacher educators, and OE staff. The purpose was to consider strategies for resolving critical vocational education personnel supply and demand problems. Presentations included in the report are "Vocational and Technical Education," by L. P. Miniar; "Challenges for Teacher Education in Vocational and Technical Education," by J. A. Beaumont; "Organizational and

Operational Patterns for Vocational-Technical Teacher Education," by Rupert Evans; "Career Education--Key to Our Survival as a Free People," by R. C. Pucinski; "Innovation Strategies for Implementing Changes in Teacher Education," by A. Lee. Task force reports included deals with administrative organization for development of professional personnel, strategies to meet common professional education program goals, techniques for personnel selection and recruitment, and implications of federal programs. VT 007 879, an interim report, is a related document.

62. Howe, Nancy M. A Study of Wyoming Business Education Teachers' Knowledge and Understanding of Vocational Education. Final Report. Cheyenne: Wyoming Research Coordinating Unit in Vocational-Technical Education, June 1969. 57p.
ED 030 740. EDRS Price: MF-$0.65; HC-$3.29.

This study was designed to obtain data regarding business education teachers' knowledge, needs, and interest in vocational education, specifically federally reimbursed vocational business and office occupations programs. The sample consisted of 142 secondary business education teachers in 82 Wyoming schools, which varied in enrollment from less than 50 students to over 300 students in both 3- and 4-year programs. Data was collected by questionnaire which included questions related to the school system and to teacher preparation. The questionnaire was designed to be answered from the teacher's own knowledge and was not intended to involve any research. The findings reveal that (a) 76 percent of the respondents said that they were not vocationally certified; (b) 31 percent of the respondents indicated that they had less than one year of office related work experience; (c) when asked if they were presently teaching in a federally reimbursed program, 55 percent said they were not, 22 percent did not know, and 7 percent did not answer. It was concluded that a high percentage of teachers lacked vocational knowledge.

63. McDowell, L. C., and B. T. Fagan. Institute for the Recruitment, Selection and Training of Teachers of Trade and Industrial Education. Final Report. Lexington: University of Kentucky, June 1969. 69p.
ED 034 057. EDRS Price: MF-$0.65; HC-$3.29.

The institute is designed to study and make recommendations for guidelines relating to the recruitment, selection, and training of teachers of trade and industrial education. The major objectives of the institute are (a) to analyze existing programs to determine desirable qualities of trade and industrial teachers, (b) to explore new sources for recruitment, (c) to develop a recruiting guide, (d) to explore the technique used in selection, (e) to develop a guide for selection, (f) to examine various plans presently being used for preparation and up-grading of teachers, and (g) to develop guidelines for the preparation of teachers. Methods used to approach the topics of recruitment, selection, and training were through papers presented by consultants, small group discussion, and field trips. Appended are sample invitations, a listing of participants, a schedule of activities, discussion forms, and evaluation instruments.

64. U.S. Department of Health, Education and Welfare, Office of Education. The Education Professions: A Report on the People Who Serve Our Schools and Colleges--1968. As Required By the Education Professions Development Act. Washington, D.C.: the Office, June 1969. 387p.
ED 040 132. EDRS Price: MF-$0.65; HC-$13.16.

The first annual assessment of the educational professions prepared by the Office of Education begins with a brief survey of the situation and continues with a detailed consideration under three main headings: (a) elementary and secondary personnel, with chapters on supply and demand; the preparation, recruitment, retention, and utilization of the teacher; teacher aides; problems of low-income families; recently desegregated schools; the handicapped; early childhood education; private schools; administration; and support personnel; (b) vocational and adult education, with chapters on the supply and demand and training of vocational and technical education personnel, and the staffing of adult education programs; and (c) higher education personnel, with chapters on the supply and demand for personnel, the preparation and utilization of the college teacher, the 2-year college, developing institutions, and support services. Each section concludes with a chapter on the federal contribution and involvement. Two appendixes provide selected statistics on educational personnel, and descriptive and statistical information on federal programs which train educational personnel.

65. Colorado State University. Occupational Education Program: Image of the World of Work, Volume I. Description of Teacher Orientation Activities, Treatment Description. Fort Collins: Colorado State University; Greeley: Rocky Mountain Educational Laboratory, August 1969. 130p.
ED 034 880. EDRS Price: MF-$0.65; HC-$6.58.

The objective of this first phase of the occupational education program was to influence work-relevant attitudes, concepts, and information through 89 teachers and principals representing 11 junior high schools and eight states. The junior high schools ranged in size from small to large, in locale from isolated to urban and suburban. The pupil population of the schools included various concentrations of ethnic and socioeconomic groups. The series of teacher orientation conferences resulted in guidelines for the assessment of progress toward the objectives of the Image of the World of Work program, a list of concerns most frequently noted, and objectives for a series of followup meetings. A wide variety of material used in the program, bibliographies, and related information. Volumes II and III are available as ED 034 885 and ED 034 884 respectively. "The World of Work and Learning," a position paper which provides an overview of all three phases of the project, is available as ED 034 881.

66. Eberle, Fred W., and Rex M. Smith. West Virginia Research Coordinating Unit for Vocational Education. Final Report. Huntington: West Virginia Research Coordinating Unit for Vocational Education, September 1969. 24p.
ED 034 054. EDRS Price: MF-$0.65; HC-$3.29.

This report covers the period from May 1967 when the Research Coordinating Unit was officially established, through August 1969. Consultative activities concerned such matters as surveys to determine educational needs, an interagency adult basic education and skill training project, graduate teacher education, and health occupations education. Information activities included the development and implementation of an information retrieval and dissemination system and provision of training sessions on ERIC. Seventeen research projects initiated during the period studied such matters as attitudes toward vocational education, summer extended employment for home economics teachers, characteristics of undereducated adults, in-service needs of vocational educators, facilities utilization, criteria for establishing area schools, and curriculum in consumer education. Planning and development activities included a long-range follow-up study of adult basic education students and institutes for adult education teachers, school administrators, and guidance counselors.

67. Ehresman, Norman D. North Dakota Center for Research in Vocational and Technical Education. Final Report. Grand Forks: North Dakota Center for Research in Vocational-Technical Education, September 1969. 21p.
ED 033 230. EDRS Price: MF-$0.65; HC-$3.29.

This final report of the operation of the North Dakota Center for Research in Vocational and Technical Education covers the period from December 1, 1966 through August 31, 1969. Activities of the first 18 months (from June 30, 1965) are reported in "Establishing a Center for Research in Vocational and Technical Education," (ED 012 333). This report includes a description of the organization and operation of the Research and Coordinating Unit, and of the projects and other activities conducted. These included stimulation of research in vocational education, conduct of research and development projects, assistance with the development of a master plan for vocational education through 1975 for North Dakota, research information dissemination, program development assistance in post secondary institutions, and efforts in the area of maintaining liaison with the many agents involved in voational education in the state. It is essentially an historical record of the unit.

68. Paulter, Albert J., and Carl J. Schaefer. Review and Synthesis of Research in Trade and Industrial Education. 2nd Edition. Research 43. Columbus: Ohio State University, Center for Vocational and Technical Education, September 1969. 56p.
ED 036 638. EDRS Price: MF-$0.65; HC-$3.29.

This document provides an analysis and synthesis of trade and industrial education research studies primarily from August 1966 to April 1, 1969 which involved the collection of data and comparison either between groups or correlation of pieces of data for the same group. Sources ranged from books, journals, and dissertations to papers presented at meetings and unpublished studies. The review provides an overview of research in the following areas: (a) philosophy and objectives, (b)

manpower needs and employment opportunities, (c) curriculum development, (d) educational programs, (e) instructional materials and devices, (f) learning processes and teaching methods, (g) student personnel services, (h) facilities and equipment, (i) teacher education, (j) administration and supervision, (k) evaluation, and (l) research. An extensive bibliography of the reviewed literature is appended. The first review of this subject covering research findings from 1962-1966 is available as ED 011 560.

69. Puder, William H. Priorities for Vocational-Technical Education Research in North Carolina. Raleigh: University of North Carolina and North Carolina State University, September 1969. 20p.
ED 036 756. EDRS Price: MF-$0.65; HC-$3.29.

This survey was conducted to establish research priorities in the field of technical and vocational education in North Carolina. Contacted by a mail questionnaire were 812 randomly selected community college administrators, private vocational school operators, state department of education personnel, and classroom teachers. In the questionnaire, respondents were asked to assign one of four priority rankings (not knowledgeable in this area, no priority, priority, or high priority) to each of 47 potential research items categorized into six general areas: curriculum, guidance, in-service and teacher education, evaluation, occupational education and manpower, and dissemination of occupational information. Additional priority rankings were made by respondents' job categories, by educational attainments, and by educational discipline. A priority ranking of suggested topics for research in vocational and technical education is appended to the study.

70. University of Minnesota, College of Education. Guide for Cooperative Vocational Education. Minneapolis: the College, September 1969. 136p.
ED 037 564. EDRS Price: MF-$0.65; HC-$6.58.

This guide is the result of deliberations at a national conference involving representatives of business, industry, labor, education, government, and the community, and at regional clinics which followed the conference. Chapter headings are "Cooperative Vocational Education and What It Will Do," "What Form and Type Is Best for a Specific School?" "Meeting Student and Manpower Needs Through Cooperative Vocational Education," "Supervising the Participation of Employers," "Establishing Administrative Relationships," "Staffing Cooperative Vocational Education Programs," and "Maintaining and Improving Cooperative Vocational Education." Appended are checklists for establishing programs for use of school administrators, principals, and coordinators, as well as a checklist of recommended practices for the use of coordinators.

71. Liner, Hugh L., ed. Vocational Agriculture in the Changing South. Proceedings of a Two Day Conference. Raleigh: University of North Carolina and North Carolina State University Agricultural Policy Institute, October 1969. 125p. ED 039 333. EDRS Price: MF-$0.65; HC-$6.58.

Changes occuring in the rural South and changing educational needs of the southern youth were topics of this conference. Consideration was also given to job opportunities, role of vocational education in developing employee traits and providing training desired by employers, training vocational agriculture teachers, and relationships of vocational agriculture with other organizations and agencies. The 64 delegates were state supervisors, superintendents, principals, teacher-trainees, and teachers from Georgia, South Carolina and North Carolina. Speeches were "The Changing Scene in Agriculture," by E. W. Jones; "Vocational Agriculture in the Changing Scene," by C. C. Scarborough; "The Rising Costs of Poor Education," by C. E. Bishop; "What We Are Looking for in Our Employees," by C. F. Lane; "Occupational Training Opportunities for Rural Youth," by C. H. Rogers; "Career Orientation Concepts Applied to Public School Students in Rural Schools," by J. R. Clary; "Possibilities of Exemplary Programs in Rural Schools," by C. V. Bert; a panel discussion on changes needed in future vocational agriculture programs; and "Linkage of vocational Agriculture with Other Organizations and Agencies for the Future," by S. C. Mayo.

72. Phillips, Donald S., and Lloyd D. Briggs. Review and Synthesis of Research in Technical Education. 2nd Edition. Research Series, No. 47. Columbus: Ohio State University, Center for Vocational and Technical Education, October 1969. 50p. ED 036 639. EDRS Price: MF-$0.65; HC-$3.29.

This document provides an analysis and synthesis of some of the research in technical education since August 1966 and in some instances includes articles published prior to 1966 which were judged to be significant for showing trends or making comparisons. An overview of research is provided for the following areas: philosophy, manpower needs, educational programs, curriculum, student personnel services, evaluation, administration and supervision, teacher education, learning processes and teaching methods, instructional materials and devices, facilities, and research. It was concluded that: (a) in general, much of the reported research suffers from deficiencies in design and methodology; (b) descriptive research studies have limited value beyond the situation in which they were conducted; (c) limited information was available about development and validation of questionnaires and opinionnaires when used; (d) research studies dealt with small segments of large problems and tended to be terminal in structure, and (e) the amount of significant research in technical education is still quite limited. An extensive bibliography of the reviewed literature is appended. The first review of this subject covering the period prior to 1966 is available as ED 011 559.

73. Barocci, Thomas A. Curriculum Initiation in Wisconsin Vocational and Technical Schools. Madison: University of Wisconsin, Center for Studies in Vocational and Technical Education, November 1969. 152p.
ED 041 123. EDRS Price: MF-$0.65; HC-$3.29.

Curriculum initiation in public vocational programs in Wisconsin is an unstructured procedure, conducted from an inadequate data base and with little or no involvement of local advisory committees. Improved procedures are recommended for the purpose of facilitating curricular relevance to rapidly changing occupational needs. Data collection was by personal interviews with 74 vocational school directors and local coordinators and 61 advisory committee chairmen. Also, 102 randomly selected vocational school teachers provided information by a mailed questionnaire. Environments and policy and/or information variables were studied as significant determinants of curricular program decisions. Environmental variables include enrollment, type of school, city size, male/female student ratio, and part time/full time ratio. Policy and/or information variables include the rationale and the data base for initiating new curriculums. It is recommended that state education agencies from an alliance with state employment service officers which can serve as manpower service centers. Such centers could provide up-to-date labor market information for a state, area, or city. In the interim, the improved use of local advisory committees is recommended.

74. Cameron, Walter Audry. "Remote In-Service Vocational-Technical Teacher Education for Beginning Teachers." Unpublished Doctor's dissertation, Ohio State University, 1969. 249p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106
ED 032 426. Not available from EDRS.

To determine the effectiveness of three remote techniques of in-service teacher education for three selected teaching skills, a sample of 39 beginning vocational teachers was randomly selected and assigned to one of three equal size treatment groups. All participants video-taped a 5-minute lesson and were instructed to view an instructional model and to practice the skills in the model by teaching 5-minute lessons to four students. Each teacher mailed his video tape to the teacher educator. The treatments consisted of utilization of the instructional model with video-phone feedback, video-mail feedback, and video-self evaluation. At the end of the 8-week experiment, posttests were made of the 36 participants who completed the program. Two experienced educators rated the teaching skill performance on all pre- and posttests. An analysis of covariance test revealed no statistically significant differences among the three treatment groups. No significant differences were obtained on the expressed level of satisfaction with the three techniques used. All groups improved their posttest teaching performances over their pretest teaching performances. It was recommended that remote supervision techniques be continued in Colorado.

75. Hillson, Maurie, and others. Education and the Urban Community: Schools and the Crisis of the Cities. New York: American Book Company, 1969. 506p. Publisher's Price: $6.75.
ED 040 233. Not available from EDRS.

This selection of 49 articles deals with the crises and conflicts of urban education. Articles discuss the impact of urbanization, social stratification, the effects of urban poverty on black and Puerto Rican families, and the disadvantaged school dropout. Many articles deal with proposed solutions. Among these are readings which discuss the technology necessary to make both curriculum and school organization more relevant to the needs of inner city youth. Curriculum changes proposed include ungraded classes and bilingual education. The school's role of making employment opportunity available, youth alienation, the problems and complexities of federal aid to education, and aspects of school community relationships are also treated.

76. Manpower Administration. Orientation, Counseling, and Assessment in Manpower Programs, MDTA Experimental and Demonstration Findings No. 5. Washington, D.C.: the Administration, Department of Labor, 1969. 21p.
ED 053 244. EDRS Price: MF-$0.65; HC-$3.29.

This outline of orientation for people who design and conduct manpower programs for disadvantaged workers discusses objectives of the orientation, characteristics of enrollees, structure and content of the program, methods of communication, measurement of progress in orientation, counseling and supportive services, testing and assessment, and prevention of dropouts. The booklet draws on the findings and conclusions of operators of experimental and demonstration programs and of others in the manpower and social science fields. Resource materials and a program checklist are included.

77. McKinney, Floyd Lee. "Citizens Perceptions and Professional Educatiors Expectations Regarding the Vocational Citizens Advisory Committee." Unpublished Doctor's dissertation, Michigan State University, 1969. 388p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106.
ED 041 142. Not available from EDRS.

To identify differences in the perceptions of vocational educators and school administrators concerning the functions and operations of the advisory committee and to identify relationships between perceived functions and operations and selected background variables, questionnaires were mailed to advisory committee members, vocational educators, and school administrators, associated with six comprehensive Michigan schools. Data analyses included the use of chi square one-way-analysis of variance. An 82.5 percent response yielded these findings: Generally the respondents were young to middle age, were well educated, but had limited experience in vocational education courses and with advisory committees; Age of respondents, years enrolled in high school

vocational education courses, and college courses taken in administration, philosophy, or teaching of vocational education were the most important background variables associated with differences of opinion; Several differences of opinion were found. The findings suggest that educational programs for both educators and committee members would improve understanding.

78. Mississippi State Department of Education, Division of Instruction. Report of Institute on the Administration of Special Education. Jackson: the Division, 1969. 32p.
ED 037 848. EDRS Price: MF-$0.65; HC-$3.29.

W. Owens Corner discusses the role of the special education supervisor in promoting his program and describes trends in special education. Questions raised by the institute participants and involving various aspects of administration are listed; presentations by members of the state department of education are summarized concerning provisions of the Elementary and Secondary Education Act and the cooperative agreement between the state vocational education division and the special education office. An institute critique is included.

79. American Association of Junior Colleges. Occupations and Education: Occupational Education Program Development Institutes for Post-Secondary Institutions. Washington, D.C.: American Association of Junior Colleges; Columbus: Ohio State University, Center for Vocational and Technical Education [1969]. 23p.
ED 041 127. EDRS Price: MF-$0.65; HC-$3.29.

Two regional Occupation Program Planning Institutes were held to provide in-service education for persons involved in administering post-secondary occupational education programs. This report contains an edited compilation of reactor comments and discussion group deliberations for these major papers: "Master Planning in Post-Secondary Occupational Education," by George W. Ebey, which discusses the need for and concerns of educational master planning and provides the elements and characteristics necessary in a planning system; "Identifying New and Emerging Occupations," by Norman C. Harris, in which a sampling approach was utilized for identifying occupations and need in the areas of agriculture and natural resources, business, health and human services, industry, and science and engineering; and "Student Recruitment and Selection for Post-Secondary Occupational Education Programs," by Robert M. Knoebel, which lists problem areas in recruitment and discusses possible solutions.

80. New York State Education Department, Bureau of Continuing Education Curriculum Services. Inservice Training Course for Guidance Staff of MDTA Classes. Albany: the Bureau, January 1970. 39p.
ED 040 434. EDRS Price: MF-$0.65; HC-$3.29.

This publication provides counselors of the Manpower Development Training Program with a practical guide to the content of a workshop for

those actively engaged in programs of in-service training. It describes educational, psychological, and sociological characteristics of the disadvantaged, both young and old. Suggested are innumerable activities for the participants in this program. The structure of the program is outlined and the role of the counselor defined. The interaction of the Manpower Development Training team is stressed as it contributes to the area of communication among participants in the program. Delineated are the services and functions of the New York State Employment Service as they relate to the training center. The guide is meant to provide the counselor with workable and effective approaches to the challenge he faces.

81. Finch, Curtis R., and others. Instructional Resources for Vocational-Technical Education: Teacher Attitude, Resource Availability, and Resource Utilization. University Park: Pennsylvania State University, Department of Vocational Education, February 1970. 59p.
ED 041 141. EDRS Price: MF-$0.65; HC-$3.29.

Semantic differential scales were used to collect data from 100 high school teachers representing eight area vocational-technical schools in Central Pennsylvania, in order to determine their attitudes toward classroom and non-classroom instructional resources and to examine interrelationships among teacher attitudes toward resources and resource utilization and availability. Results indicated that the teacher group generally had a more favorable attitude toward "traditional" instructional resources as opposed to "progressive" materials. The traditional materials were used more often and were more readily available. Relationships between attitude and use and between availability and use were generally positive and significant. Factor analysis of attitude variables revealed that teachers may view instructional resources in accordance with their personal involvement with resource preparation, selection, presentation, and application. The results indicate that preservice and in-service experiences should be provided to acquaint teachers with new resources.

82. Massachusetts State Board of Education, Division of Research and Development. Massachusetts Vocational Education Research Coordinating Unit. Final Report. (July 6, 1966-October 31, 1969). Woburn: the Division, February 1970. 28p.
ED 037 569. EDRS Price: MF-$0.65; HC-$3.29.

This final report of the Massachusetts Vocational Education Research Coordinating Unit (RCU) covers the activities during the period April 1967 through October 1969. During the first year the RCU concentrated on establishing an information system and announcing its existence. One third of the staff time was devoted to helping the Schaffer-Kaufman Study. Research projects the second year focused on (a) disadvantaged youth in urban vocational school setting, (b) development of a system for a state-wide evaluation of vocational-technical education, (c) Massachusetts information feedback system for vocational education, (d) an evaluation of vocational-technical school facilities, (e) prototype of a program for girls in vocational-technical education,

and (f) attitudes of junior high school staff members toward vocational education in the high school. Conclusions and recommendations are included.

83. Rice, Dick C., and Richard F. Meckley. Supervision and Decision-Making Skills in Vocational Education: A Training Program Utilizing Simulation Techniques. Final Report. Columbus: Ohio State University, Center for Vocational and Technical Education, March 1970. 116p.
ED 038 501. EDRS Price: MF-$0.65; HC-$6.58.

Simulation exercises focusing on the development of personal and technical skills of supervision and decision making are presented as the first in a series of projects designed to develop, test, and disseminate simulation training materials for state leadership development. The exercises incorporate three dimensions of supervisory behavior: functions, goals, and processes. This publication includes four simulation exercises, an instructor's guide, background for the exercises, and student working papers. The exercises may be used individually, as a group of four related exercises, or in combination with exercises to be developed within this series. These exercises were developed from actual case historia and problems submitted by present leaders of vocational education. The instructor's guide attempts to provide assistance in conducting training sessions utilizing this material.

84. Chamber of Commerce of the United States. Where the Action Is: A Log of Successful Urban Programs Involving Bussinessmen, Chamber of Commerce or Associations. Washington, D.C.: the Chamber, April 1970. 57p.
ED 044 600. EDRS Price: MF-$0.65; HC-$3.29.

This log cites about 150 successful programs dealing with key urban problems which involve businessmen either individually or through efforts of their companies, chambers of commerce, and trade and professional associations. The examples are listed alphabetically by location by city or state name for statewide programs. A few national programs are listed. Brief descriptions of each are provided. Programs are categorized under consumer assistance, crime control, education, equal opportunity, government modernization, housing, manpower/jobs, minority enterprise, pollution control, total community development, urban transportation, and youth.

85. Price, Ray G., and Charles R. Hopkins. Review and Synthesis of Research in Business and Office Education. Columbus: Ohio State University, Center for Vocational and Technical Education, April 1970. 120p.
ED 038 520. EDRS Price: MF-$0.65; HC-$6.58.

Research and related literature completed during 1966-1968 is reviewed in order to provide researchers, curriculum development specialists, and practitioners with an authoritative analysis. The review if limited

primarily to those studies with relevance for business and office preparation in senior high schools and 2-year post secondary schools; however, research relevant to business teacher education is also included. Entries are organized according to the following major headings: philosophy and objectives, manpower needs and employment preparation, curriculum development, educational programs, instructional materials and devices, learning processes and teaching methods, student personnel services, facilities and scheduling, teacher education, administration and supervision, evaluation, and research. A bibliography of the cited materials gives ERIC document numbers for documents in the ERIC system. The first edition, covering the period 1960-1966, is available as ED 011 566.

86. American Telephone and Telegraph Co. Bridging the Gap: An Independent Case Study. New York: the Company; Institute for Educational Development, May 1970. 67p.
ED 050 266. EDRS Price: MF-$0.65; HC-$3.29.

American Telephone and Telegraph instigated this program to help students discover how their schooling relates to assuming the responsibilities of citizenship, useful careers, earning power, and the possibilities of work that satisfies. The four interrelated objectives are (a) to help students who are underachievers; (b) to break down barriers and bridge the communication gap between students, counselors, teachers, businessmen, and public officials; (c) to improve the educational process; and (d) to arrange for the cooperation of many businesses and public organizations. Five programs are available to accomplish these objectives: 4-week counselor-teacher summer workshops; 1-day teacher workshops at local businesses; six half-day workshops for students; all-year-long company resource programs; and evening parent workshops. Guidelines for implementation and suggestions for conducting workshops are provided. Materials used for establishing and evaluating workshops which have been conducted are included in the appendix.

87. American Vocational Association. Convention Proceedings Digest. Washington, D.C.: the Association, May 1970. 243p.
ED 041 138. EDRS Price: MF-$0.65; HC-$9.87.

To provide current information on vocational education, proceedings of the 1969 American Vocational Association convention were prepared by recorders appointed for each area. Sections are general sessions; awards and citations; house of delegates; program of work and policy resolutions; departments of adult, post secondary, secondary, and teacher education; departments of research and evaluation, special and related programs, and supervision and administration; educational divisions of agriculture, business and office, distribution, home economics, industrial arts, technical, and trade and industry; divisions of new and related services, including guidance, health occupations education, manpower, research, and vocational instructional materials; related groups and organizations; and a listing of architectural, educational, and commercial exhibitors.

88. Brandon, George L., ed. Research Visibility: Development of Professional Personnel for Vocational-Technical Education. Washington, D.C.: American Vocational Association, May 1970. 16p.
ED 039 358. EDRS Price: MF-$0.65; HC-$3.29.

The professional development of vocational education personnel is becoming a critical issue as a result of the expanding role of vocational education, federal legislation, and an impending teacher shortage. Current efforts to meet this challenge are described in 18 reviews which concern opinion leaders, disadvantaged youth, career development, teacher education, emerging occupations, teaching methods, postsecondary programs, teacher recruitment, dropout prevention, manpower training, performance criteria, preservice education, and national conferences on teacher education. "Plain Talk," a continuing column by the editor, discusses the importance of establishing and implementing educational priorities. The bibliography lists an additional 28 related reports.

89. Stitt, Thomas R. Structured Occupational Internship for Experienced Vocational Teachers. Carbondale: University of Southern Illinois, Department of Agricultural Industries, May 1970. 15p.
ED 053 288. EDRS Price: MF-$0.65; HC-$3.29.

The rapid industrialization of agriculture has necessitated the implementation of programs which more effectively coordinate state supervision activities, industry participation, and teacher education. In order to meet this need, a structured occupational experience was designed to provide beginning teachers with agricultural industry-related occupational experiences. This was achieved through a three-phase program including pre-internship preparation, occupational internship, and post-internship analysis. These phases were integrated into a course entitled "Structured Occupational Internships for Experienced Vocational Teachers." A brief description and evaluation of this program is included in this report.

90. Askren, William B., and Robert I. Valentine. Value of Job Experience to Teaching Effectiveness of Technical Training Instructors. Wright-Patterson Air Force Base, Ohio: Air Force Human Resources Laboratory, June 1970. Available from the National Technical Information Service, Operations Division, Springfield, Va. 22151; price: mf $0.95, hardcopy $3.00.
ED 048 536. Not available from EDRS.

Air Force technical training instructors with and without field job experience were compared regarding teaching effectiveness. Student grades, written critiques, and supervisor ratings were used to measure effectiveness. Results indicated significant differences between instructors on student overall course grades and critiques. However, an interaction effect existed between type of instructor and phase of the course. Supervisors rated job experienced instructors higher.

91. Carpenter, Earl T., and John H. Rodgers. Review and Synthesis of Research in Agricultural Education. Research Series, No 59. Columbus: Ohio State University, Center for Vocational and Technical Education, June 1970. 90p.
ED 040 275. EDRS Price: MF-$0.65; HC-$3.29.

To obtain an overview of research in agricultural education since 1966, approximately 500 studies were reviewed under these topics: (a) philosophy and objectives, (b) manpower needs and employment opportunities, (c) teacher education, (d) learning processes and teaching methods, (e) instructional materials and devices, (f) curriculum development, (g) administration and supervision, (h) educational programs, (i) facilities and equipment, (j) student personnel services, and (k) evaluation. Some conclusions and recommendations include the following: The level of sophistication in research is improving; More research is being conducted by professionals, despite the fact that a majority of the research is undertaken by graduate students; There has been a shift from production agriculture to programs of off-farm agricultural occupations; Means for increasing the impact of vocational guidance services upon students is needed; Trends in off-farm occupations need clarification so that courses and guidance information can be provided; and A new philosophical basis for agricultural education, based on sound research techniques, should be developed. The earlier "Review and Synthesis," covering research prior to 1966, is available as ED 011 562.

92. Feirer, John L., and John R. Lindbeck. Development of Junior/Community College Curricula for Future Teachers of Industrial Education. Interim Report. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Research, June 1970. 580p.
ED 039 884. EDRS Price: MF-$0.65; HC-$19.74.

The current and projected shortage of qualified industrial education teachers threatens the continued growth of technical programs in the community junior colleges. As a result, this study of current teacher preparation programs in six states was begun. An analysis of catalogs of all public junior and senior colleges in California, Florida, Illinois, Michigan, New York, and Texas reveals the kind of courses currently offered that might be useful in such preparation. A survey of current research and of the responses to questionnaires by administrators, counselors, department heads, and transfer students reveals the interface between junior college programs and those at the senior institutions. Finally, a work-study conference of individuals with experience in this field developed a guideline bulletin that discusses the teacher shortage problem, facilitation of transfer, current and future institutional requirements, and problems faced by the transfer student. Concurrently developed are two teacher preparation programs that emphasize the interface between the junior college and the senior institution: Partnership Program, designed for students who have already decided to become industrial education teachers even before entering the junior college; and Pyramid Program, designed for those who decide to teach while in junior college or before entering a transfer institution. A comprehensive bibliography is included.

93. Oregon State Board of Education, Division of Community Colleges and Career Education. The Role of the Community College in Training the Disadvantaged-Handicapped Student. Final Report. Salem: the Division; Corvallis: Oregon State University, Division of Vocational, Adult, and Community College Education, June 1970. 79p.
ED 042 043. EDRS Price: MF-$0.65; HC-$3.29.

Ten of Oregon's 12 community colleges were represented at this workshop sponsored by the Oregon Board of Education. Each participant held a position of importance in developing programs for handicapped students in his agency. The workshops examined the problems of the handicapped student, in terms of specific problems of each group as well as problems faced by handicapped students in general; studies successful programs and instructional materials; and discussed innovative methods and techniques. After examining the role of the community college in rehabilitation, participants recommended modifications in teacher education and made proposals for new programs.

94. Wallace, Harold R. Review and Synthesis of Research on Cooperative Vocational Education. Research Series, No. 60. Columbus: Ohio State University, Center for Vocational and Technical Education, June 1970. 124p.
ED 040 274. EDRS Price: MF-$0.65; HC-$6.58.

Basic concepts, definitions, and philosophical positions concerning cooperative vocational education were identified to form a theoretical model for program development. The review crosses the boundaries of the occupational fields within vocational-technical education and attempts to focus more narrowly on a specific instructional methodology. "Dissertation Abstracts," professional journals, and a computer search of the ERIC collection were reviewed to identify 279 research studies with publication dates from 1934-1969. Major topics are the student learner; the employment community; educational technology; program implementation; and priorities, problems, and issues. Some research gaps include a theoretical and philosophical framework for research and development in vocational and technical education; interpretative dissemination systems for manpower data; research technology to provide for transformation of occupational analysis data into instructional objectives; and communication of research and development products by practitioners in vocational-technical education.

95. Brown, Donald V. Planning Immediate and Long Range Teacher Education Programs in Vocational Education. Final Report. Knoxville: University of Tennessee, College of Education, July 1970. 301p.
ED 044 533. EDRS Price: MF-$0.65; HC-$13.16.

Hoping to find ways to avoid unnecessary duplication of effort by the various service areas, this seminar placed major emphasis on identifying characteristics common to all vocational areas. With the assistance of nationally recognized experts in vocational education, teacher education, and the behavioral sciences, the following topics

were discussed: (a) vocational teacher education challenges, (b) systems analysis in education, (c) human development programs and concepts, (d) post secondary education challenges, (e) cooperation in vocational teacher education, and (f) teacher certification for the future. Intermingled with these formal presentations, the 108 participants also made a study of four distinct and unique models in vocational education: the Teacher Institute, the Webster College's Veterans Accelerated Urban Learning for Teachers (VAULT) Program, the University of Tennessee Pilot Teacher Program, and the Oconaluftee Job Corps Project in North Carolina. Following the general sessions, the conferees were divided into small discussion groups by service areas and also by geographic areas. Due to the success of this service, others are being planned for the future.

96. Cameron, Walter A., and Calvin J. Cotrell. Remote Feedback Techniques for Inservice Education. Assessment of Micro-Teaching and Video Recording in Vocational and Technical Teacher Education: Phase X. Interim Report. Research and Development Series, No. 40. Fort Collins: Colorado State University, Department of Vocational Education; Columbus: Ohio State University, Center for Vocational and Technical Education, July 1970. 86p.
ED 042 901. EDRS Price: MF-$0.65; HC-$3.29.

Three remote feedback techniques involving microteaching and video-recording were tested to facilitate in-service teacher education to teachers in isolated circumstances. From a population of 57 beginning teachers of health occupations education, trade and industrial education, and technical education in Colorado, a sample of 39 teachers was selected randomly and assigned to three equal-treatment groups. The pretest-posttest control group design was selected to study video-phone feedback, video-mail feedback, and video-self evaluation. A panel of two experienced state supervisors rated the 5-minute pretest lesson and the posttest performance of the teachers with a six-point rating scale. In addition, a satisfaction scale and a reaction questionnaire were administered. Conclusions were that (a) feedback from the teacher educator via mailed videotape presentation or via telephone had no more effect on improving teacher performance than a video-self evaluation; (b) teacher satisfaction with the three remote techniques was not dependent upon the type of feedback received; and (c) remote techniques in an in-service program were found feasible and did help beginning teachers analyze and change their teaching behavior.

97. Norton, Robert E. Institute for Improving Vocational Education Evaluation. Final Report. Fayetteville: University of Arkansas, July 1970. 282p.
ED 045 839. EDRS Price: MF-$0.65; HC- 9.87.

To help equip persons in leadership positions with procedures and techniques needed for obtaining valid and reliable evaluative data, this institute involved 100 applicants, several alternates, and consultants in various planned activities. The institute focused on these major

purposes or outcomes: (a) participants would learn additional knowledges and skills needed for improving vocational education evaluation, (b) participants would initiate the development of an evaluative plan for use within their agency; (c) task force groups would interact with the consultants, synthesize the papers presented, and make recommendations regarding the most appropriate techniques of evaluation available; and (d) the Institute staff would consolidate the various reports into a general guide on strategies and procedures of evaluation. Evaluation of the institute indicated success in accomplishing the established objectives. Based on a followup of the participants, the major recommendation was that additional institutes be held throughout the country.

98. Riessman, Frank, and others. Essays on New Careers: Social Implications for Adult Educators. Syracuse: Syracuse University, July 1970. 88p. Publisher's Price: $2.50. ED 039 459. Not available from EDRS.

These essays concentrate on the challenge that adult education faces in helping the urban poor develop meaningful paraprofessional careers in the human services. In one essay, the reformist approach to improving access to credentials is compared with the radical approach, which questions the validity of the credentials process as well as its structures. Another essay discusses the roles of paraprofessionals undergoing training, recruitment and preparation of trainers, and relationships between the two groups. The talent corps work study program is also described, along with the career development problems of its graduates. An assessment is given of potential innovations (including fuller use of indigenous personnel) in inner-city law enforcement. Attention is given to the organizing paraprofessionals in human service agencies (notably hospitals), not only for "bread and butter" demands, but for better services, closer community ties, and new routes to advancement. Finally, possibilities are examined for stimulating ghetto economic development through indigenous institutions.

99. Taxis, Linda A., ed. Man-Society-Technology. Washington, D.C.: American Industrial Arts Association, August 1970. 583p. ED 057 237. EDRS Price: MF-$0.65; HC-$19.74.

The 32nd annual American Industrial Arts Association (AIAA) Convention was held in Louisville in 1970. Topics of the AIAA general session addresses were "Industrial Arts--The Biender Between Social Form and Technical Function," "Technology and Society: Present and Future Challenges," "A Student-Oriented Industrial Arts," "Man: End or Means," and "Extensions of Technology: From Utopia to Reality." There were also 31 general session addresses for the American Council of Elementary and Secondary Industrial Arts, the American Council of Industrial Arts Supervisors, and the American Council of Industrial Arts Teacher Education. Representative addresses from the major and special interest sessions included 146 presentations in the areas of instructional systems, technology, classroom teachers, metals and

materials, computer assisted instruction, curriculum development, electricity/electronics, federal government, teacher education, students, correctional institutions, evaluation, woods, special education, business, guidance, safety, drafting, graphic arts, media, plastic, research, communications, disadvantaged, power, and space technology.

100. Southern Regional Education Board. Summer Institute in Agricultural Mechanics Education, Southern Region, Proceedings (Blacksburg, Va. August 3-7, 1970). Atlanta: the Board; Blacksburg: Polytechnic Institute and State University, August 1970. 136p.
ED 054 329. EDRS Price: MF-$0.65; HC-$6.58.

This summer institute emphasizes the establishment of minimum measurable standards of attainment in agricultural engineering phases of teacher education in agriculture. Speeches presented are "Where We Are in Agricultural Mechanics Education," by Alfred H. Krebs; "Research Offerings for More Effective Teaching in Agricultural Mechanics Education," by G. E. Henderson; "Teacher Education in Agricultural Mechanics--Its Role in the Future," by George W. Weigers, Jr.; "Identifying Instructional Areas in Agricultural Mechanics," by William C. Boykin, Sr.; "Trends in Vocational Agriculture and Agricultural Mechanics Education," by H. N. Hunsicker; "Preparing Educational Objectives, Defining Affective Goals, Evaluating the Usefulness of Objectives, Analyzing Performance Problems," by Robert F. Mager; "Appropriate Terminology for Agricultural Mechanics Education," by Carlton E. Johnson; "Suggested Courses in Agricultural Mechanization for Agricultural Education Graduates on the College Level," by Roland R. Harris. Appended are an evaluation, summary, and task force reports for metals, soldering, electrictity, arc welding. gas welding, and cutting.

101. Stevenson, William W., and others. Updating the Process and Content of Teacher Education Courses To Reach Less-Advantaged Adults in Metropolitan Areas. Final Report. Stillwater: Oklahoma State Department of Vocational and Technical Education; Oklahoma State University, September 1970. 86p.
ED 049 191. EDRS Price: MF-$0.65; HC-$3.29.

A 2-week institute was held to orient participants to the world of the disadvantaged and to give them ideas on methods of training teachers for disadvantaged adults. The 77 participants, including teacher educators, teachers, community workers, state department of education personnel, and counselors, attended lectures by consultants from the School of Occupational and Adult Education at Oklahoma State University, the State Department of Vocational and Technical Education, and the area Manpower Institutes for Development of Staff, and participated in small-group discussions. An important feature of the institute was a live-in arrangement whereby participants spent four nights in the home of a disadvantaged family. Most participants evaluated the institute favorably. In addition, a 4-month followup found that most participants subsequently engaged in one or more activities designed to improve education for the disadvantaged.

102. U.S. Department of Health, Education and Welfare, Office of Education. Guidelines for Developing Program in Agricultural Education for the 1970's. Washington, D.C.: the Office, September 1970. 29p.
ED 051 391. EDRS Price: MF-$0.65; HC-$3.29.

Designed as a guideline for secondary schools, post-secondary vocational technical schools, adult programs, and 2-year colleges, this material should be of assistance to all persons responsible for implementing and administering new and ongoing programs in agricultural education. Preparation of the guidelines was initiated at a national OE seminar involving agricultural supervisors and teacher educators, and they were later refined by committees and consultants. The six primary objectives are to provide information enabling state directors of vocational agriculture and staffs of agricultural education to examine their role in initiating, administering, and coordinating local programs; to improve the education and training programs of students preparing for occupations in agriculture; to assist in development special and innovative agricultural career programs; to develop agricultural programs for disadvantaged and handicapped; to improve the efficiency of the agricultural industry by helping develop competence and leadership of its managers and employees; and to strengthen ancillary services. These guidelines should be expanded and adapted for each state program.

103. U.S. Department of Health, Education and Welfare, Office of Education. The Education Professions, 1969-70. Washington, D.C.: the Office, September 1970. 90p.
ED 049 161. MF-$0.65; HC-Not available.

This annual report on the state of the education professions focuses on the problem of educating students from low-income families in an attempt to sharpen understanding of the issues involved. Subjects for the chapters were chosen with respect to concern with these particular problems and because surveys had been conducted which bear on them in providing new data. Chapter 1 focuses on teaching low-income students and defines some of the major issues in educating these children in inner-city schools. Chapter 2 sets forth the Commissioner's plans to allocate funds authorized by the Education Professions Development Act most of which are directed to serving the needs of low-come children. The next three chapters report on recent studies and surveys as they relate to students from low-income families. Chapter 3 is an analysis of data derived from a pilot survey of staffing patterns in the elementary and secondary schools which was conducted by the National Center for Educational Statistics. Chapter 4 examines some of the problems in educating Mexican-American children. Chapter 5 delineates the role of 2-year colleges in serving low-income students. The final chapter is a projection of the needs for educational personnel in vocational and technical education with particular emphasis given to the personnel who serve the economically disadvantaged. Appendixes contain a description of EPDA activities (1969 and 1970) and an explanatory note on the supply and demand for educational personnel.

104. Brandon, George L., ed. Research Visibility: Improving Vocational Education. Washington, D.C.: American Vocational Association, October 1970. 16p.
ED 043 775. EDRS Price: MF-$0.65; HC-$3.29.

The 14 research reviews pertaining to improving vocational education are organized under the topics: Training of Educational Personnel, which reviews simulation and other techniques for developing leadership, facilities and equipment for a comprehensive program, a national conference on post secondary programs, development of teacher competencies in health occupations programs, project method in distributive education, and program planning, budgeting, and evaluation; and Curriculum and Classroom technique, which reviews teacher use of instructional resources, military technical training, employers' attitude toward occupational education, sub-professional personnel in health services, and microteaching and video recording. "Plain Talk," a continuing column by the editor, discusses the necessity of program improvement through evaluation of goals and implications of economy projections to vocational education. An additional 27 studies and ordering information are included in the bibliography.

105. Bice, Gary R. Working with Opinion Leaders To Accelerate Change in Vocational-Technical Education: An Application of Research. Columbus: Ohio State University, Center for Vocational and Technical Education, November 1970. 27p.
ED 044 502. EDRS Price: MF-$0.65; HC-$3.29.

Recognizing that the real problem with innovation is the need to shorten the time required for its acceptance and application, this projects identifies strategies beneficial to the change agent. Assuming he understands the process of change and the role of opinion leaders, the change agent can direct his attention to the guidelines presented for (a) identifying opinion leaders, (b) identifying school systems in which opinion leaders work; (c) influencing opinion leaders, (d) assisting opinion leaders in dissemination, and (e) achieving mass adoption. These guidelines, developed from a review and analysis of selected literature, offer a synthesis of current thought.

106. American Vocational Association. Convention Proceedings Digest. (New Orleans, Louisiana, December 4-9, 1970). Washington, D.C.: the Association, December 1970. 308p.
ED 051 393. EDRS Price: MF-$0.65; HC-$13.16.

To provide current information on vocational education, proceedings of the 1970 American Vocational Association Convention were prepared by recorders appointed for each area. Sections are general sessions; awards and citations; house of delegates; program of work and policy resolutions; departments of adult, postsecondary, secondary, and teacher education; departments of research, administration, evaluation and supervision; educational divisions of agriculture, business and office, distribution, home economics, industrial arts, technical, and trade and industry; divisions of new and related services, including guidance, health occupations education, manpower, research and

vocational and instructional materials; related groups and organizations; and a listing of architectural, commercial, and educational exhibits.

107. Brown, Donald V. Industry-Education Cooperative Program for Preservice and Inservice Vocational and Technical Teacher Training. Final Report. Oak Ridge, Tenn.: Union Carbide Corp., Nuclear Division, December 1970. 65p.
ED 054 364. EDRS Price: MF-$0.65; HC-$3.29.

An industry-university partnership was established in 1966 in the form of the Training and Technology (TAT) project at the Oak Ridge G-12 Plant. TAT, designed to bring the expertise of industrial technology closer to those in vocational education, proposed to involve worker trainees, teachers, and industrial personnel in a two-level training program. Now with 4 years of research and experimentation through a combination of industry and university facilities, equipment, and personnel, the TAT project has evolved into two major components: worker training of disadvantaged youth and adults and the Teacher Institute. This report concerns the Teacher Institute program (1968-70) as operated by the University of Tennessee in cooperation with agencies within the TAT project and covers In-service Teacher Preparation, Prospective Teacher Preparation, the Graduate Fellowship Program, and conclusions and recommendations. Included in the appendixes are sections on representative in-service machinery program, typical program schedule, program appraisal, excerpts from the evaluation report, evaluation questionnaire, and proposed and revised course syllabi.

108. Woodin, Ralph J. Supply and Demand for Teachers of Vocational Agriculture in 1970. Columbus: Ohio State University, Department of Agricultural Education, December 1970. 33p.
ED 059 347. EDRS Price: MF-$0.65; HC-$3.29.

This annual study was conducted to determine the national supply and demand for teachers of vocational agriculture for purposes of planning a nationwide recruitment program. A questionnaire was completed and returned by head state supervisors and teacher educators in all institutions preparing teachers of vocational agriculture. The number of vocational agriculture teaching positions in the United States in 1970, the percentage of graduates entering various occupations, enrollment in colleges of agriculture, types of teaching positions, placement of graduates, teaching positions by states and regions, and a 6-year comparison of selected information on supply and demand of teachers in vocational agriculture are all contained in the report. A 70 percent gain in teacher supply is shown for a 6-year period, with 1,700 persons qualified for teaching vocational agriculture in the United States in 1970. The study concludes that a goal of qualifying 1,800 persons each year is a realistic one. This study should be useful to agricultural supervisors and teachers for preparing recruitment programs. Also available are reports for 1969 (ED 037 563) and 1971 (VT 014 574 - ED 059 366).

109. Cincinnati Public Schools. Evaluation Report of the Workshop for Vocational and Special Education Teachers, Cincinnati Public Schools, 1969-1970. Cincinnati: the Schools; Pittsburgh: University of Pittsburgh, Office of Research and Field Services, 1970. 30p.
ED 048 684. EDRS Price: MF-$0.65; HC-$3.29.

An evaluation report of a workshop conducted by the Office of Research, University of Pittsburgh (May 18-21, 1970) for vocational and special education teachers in the Cincinnati public schools is presented. A summary of the workshop, objectives, consultations, in-service workshops, and evaluations by participants and staff are enumerated. Such concerns as a need for more instruction in the use of media, better advance information, workshops of longer duration, and involvement of more nonteaching personnel from related fields were emphasized in the evaluation. As part of the plan for improved capability of the Cincinnati Public Schools to educate the handicapped children, an analysis of the incidence of employment, type of employment, income range, and employer attitude was also conducted. Pupils involved in the study were considered as finished products of the special programs. Introductory and summary parts of the study are included in the report. Persons wanting a copy of the full study are requested to contact Dr. Paul Miller, Superintendent Cincinnati Public Schools.

110. Ditchley Foundation. Education for the Less Privileged: A Report of the Anglo-American Conference on Education for the Less Privileged. Oxford, England: Ditchley Foundation; Dayton, Ohio: Institute for Development of Educational Activities, 1970. 26p.
ED 045 794. EDRS Price: MF-$0.65; HC-$3.29.

The Anglo-American Conference on Education for the Less Privileged was held in 1970 in Oxfordshire, England. Fourteen representatives from the United States met with 11 British conferees. The purpose of the conference was to examine the present character and availability of education (preprimary to 18 years), including vocational and technical education, for the less-privileged elements of the population of the United States and Britain respectively, excluding the physically handicapped, but including immigrants, racial minorities, others with a language problem, and those handicapped by backgrounds of poverty, ignorance, and indifference. The conference was also to consider its adequacy or shortcomings in overcoming such difficulties and handicaps and providing a fair opportunity for all in life in a modern society; and to indicate the lines on which provision of education for the less privileged should be improved in scale, organization, and content. The conference members agreed on the need for consistent and long-range planning in education for the less privileged. They accented the importance of teaching basic knowledge, while advocating the development of a close relationship between school, parents, and community. They stressed the importance of special, practical, and continuous training for teachers of the disadvantaged.

111. Florida State University, Department of Educational Administration. Vocational-Technical Education in Human Resources Development in Florida: A Statewide Evaluation. Recommendations of the Florida State Advisory Council on Vocational and Technical Education. Tallahassee: the Department, 1970. 386p.
ED 045 826. EDRS Price: MF-$0.65; HC-$13.16.

Presented in two sections, this report consists of recommendations based on goals suggested by the National Advisory Council and the U.S. Office of Education and the work of a study organized as appendixes under each of the same goals. The summary of the recommendations revealed that the most frequently encountered problem was the tendency to treat the symptoms of human differences without considering the implications for education. Other major needs are a total management information system and coordination between the major colleges and the local county-operated vocational centers.

112. Holmen, Holger Emanual. "Professional Problems of Trade and Technical Education Teachers in the Fifteen Area Post-Secondary Schools of Iowa with Implications for In-Service Teacher Education." Unpublished Doctor's dissertation, University of Missouri, 1970. 139p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106.
ED 033 214. Not available from EDRS.

To ascertain the professional problems of teachers of trade and technical education and to solicit opinions regarding probable causes, 103 Iowa post-secondary trade and technical teachers and their 26 immediate supervisors were interviewed. Some findings were that (a) 37 percent of the teachers had no formal education beyond high school, almost 17 percent were college graduates; (b) 7.8 percent had served a formal indentured apprenticeship; (c) 35 percent had 20 or more years of trade experience and only 4 percent had less than 5 years; and (d) the teacher spent an average of 27.5 hours per week in the classroom and laboratory activities. Problems and perceived causes were classified as relating to teaching and evaluation; working with others, including making the transition from industry, and motivating students; and facilities. Some primary causes indicated were inadequate time, teaching experience, educational preparation, in-service training, materials, and facilities.

113. Kahler, Alan A., and others. Instructional Approaches and Content in Vocational Education. Washington, D.C.: American Educational Research Association, 1970. 69p.
ED 041 144. EDRS Price: MF-$0.65; HC-$3.29.

This collection of papers presented at the 1970 annual meetings of the American Educational Research Association includes "An Experimental Evaluation of the Effectiveness of Selected Techniques and Resources on Instruction in Vocational Agriculture," by A. A. Kahler and others, discussing the influence of techniques and methods on student attainment in selected subject matter areas; "Individual Learner Variables and the Prescribing of Instructional Methods; An Experimental Investigation,"

by R. W. Haskell, reporting the relationship between selected personality variables of learners and their academic performance; "The Effectiveness of Selected Self-Instructional Approaches in Teaching Diagnostic Problem Solving," by C. R. Finch, describing the effects of three different approaches to teaching trouble-shooting; "A Factor Analysis of the Common Training Needs in Teacher Education Programs for Occupational Education," by E. W. Courtney, presenting an approach to developing common curriculums for vocational teachers; and "A Multi-Dimensional Approach to the Guidance Concept Among Secondary School Personnel," by C. I. Jones and P. S. Vivekananthan, discussing an attempt to determine differences in selected educational and career concepts held by secondary school faculty.

114. McCracken, John David. "The Utilization of Information by State Supervisory and Teacher Education Personnel in Vocational and Technical Education." Unpublished Doctor's dissertation, Ohio State University, 1970. 120p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106. ED 038 369. Not available from EDRS.

Data were gathered by mail questionnaire from 230 of the 289 teacher educators and state supervisors in seven states to investigate factors influencing the utilization of information for problem solving in vocational and technical education. Data were treated through a description of the sample, the method of paired comparisons, analysis of contingency tables, and multiple linear regression. Teacher educators were more likely than state supervisors to use research-oriented literature and search impersonal sources of information. State supervisors were more likely than teacher educators to use guidebooks, summaries, and interpretations of research and to consult with associates within their organization. Both groups tended to conduct their own literature search, read summaries and interpretations of research, utilize materials from educational institutions, use a library within their organization, and consult with personal sources in problem resolution. The factors of accessibility, ease of use, and degree of experience were positively correlated with frequency of literature source selection. Accessibility appeared to be the most potent variable for prediction of literature source utilization. Technical content was negatively correlated with frequency of use.

115. Stadt, Ronald W., and Larry J. Kenneke. Teacher Competencies for the Cybernated Age. Washington, D.C.: American Council on Industrial Arts Teacher Education, 1970. 37p. ED 055 227. EDRS Price: MF-$0.65; HC-$3.29.

Industrial arts must be prepared to respond to the changes brought about by contemporary technological advancement. The impact that technology will have upon people and the impact of information processing upon man and his world should be of major concern to industrial arts educators. Principal areas of consideration should be the effects of technology and information processing on productivity, consumption, employment, leisure, the unskilled, and mobility. All of these factors will have implications for industrial arts teacher education in regard to man and

the labor force, the economy, technology, enterprises, and the educational enterprise. If industrial arts programs are to assume the responsibility for informing youth and vocationally ill-prepared adults about contemporary work and technology, industrial arts teacher education must foster understandings of both the technical and the human sides of enterprise.

116. Washington State Board for Vocational Education. Materials Prepared by Participants in EPDA Vocational Awareness Institute (Summer 1970). Olympia: the Board, 1970. 170p. ED 053 286. EDRS Price: MF-$0.65; HC-$6.58.

The 24 participants attended an Education Professions Development Act (EPDA) institute which was designed to train elementary teachers to develop an awareness of occupations in their children, an ability to utilize community resources, and an ability to articulate and integrate vocational awareness in the elementary school curriculum. Activities included a number of speakers, field trips, group work in preparing, executing and evaluating a unit on an occupation, individual work reviewing literature concerning vocational education, and/or awareness, and developing an action plan. Participant interest contributed to the success of the institute. Evaluation summaries by a local director of occupational education, unit plans, individual unit and institute evaluations, action plans, and individual literature reviews are included in the report.

117. Wilson, Roger John. "An Investigation of Factors Essential to Selecting and Preparing on-the-job Trainers for a Post Secondary Cooperative Vocational-Technical Education Program." Unpublished Doctor's dissertation, Ohio State University, 1970. 153p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106. ED 043 770. Not available from EDRS.

By passing the 1968 Vocational Education Act with its special provisions for cooperative education, Congress has highlighted the value and rapid growth of on-the-job programs. However, with this increased emphasis on cooperative education comes the need for investigating the present practices of selecting and preparing the on-the-job trainer assigned to a student-learner. For the most part data for the study was gathered by reviewing related literature and visiting a sample of nine 2-year institutions to interview teacher-coordinators. An analysis of the interview findings led to the conclusion that the selection of the on-the-job trainer was under the control of the teacher-coordinator through his approval or disapproval of the cooperating employer. It was also concluded that on-the-job trainer was given little if any planned preparation before he undertook his teaching task. A significant recommendation of this study is that teacher-coordinators must take advantage of their responsibility and position to control the selection and preparation of the on-the-job trainers.

118. Wroot, Richard Everatt. "A Study of the Need for Pedagogical Training as Perceived by the Staff of the Alberta Institutes of Technology." Unpublished Master's thesis, University of Alberta, 1970. 202p.
ED 049 377. EDRS Price: MF-$0.65; HC-$3.29.

The main purpose of this study was to determine the need for pedagogical training as perceived by practicing instructors and academic administrators in two post secondary technical and vocational institutes. To collect the needed data, an instrument was developed to elicit opinions on the importance and need of certain skills and knowledges to an instructor, the helpfulness of suggested in-service and supervisory activities on the improvement of instruction, and the best methods for developing practical teaching skills in the beginning instructor. Statistical analysis revealed that (a) competencies imporant to an instructor include communication skills, school management, and the development and maintenance of discipline; (b) in-service and supervisory activities helpful in improving teaching include demonstrations of teaching methods, practice teaching with video-tapes, and observation of fellow instructors; (c) the most effective methods of internship, student teaching, or practice teaching sessions; and (d) the perceived need for pedagogical training is influenced by such factors as work area, staff position, and technical qualifications.

119. Hirshfield, Marvin. Updating the Process and Content of Teacher Education Curriculums To Reach Disadvantaged Youth in Metropolitan Areas. Vol. 10, Final Report. Philadelphia: Temple University, Division of Vocational Education, February 1971. 266p.
ED 056 201. EDRS Price: MF-$0.65; HC-$9.87.

Ninety-one professionals from 22 states participated in an institute designed to examine ways to effect behavioral changes in power structures and decision policy makers so that legislative mandates for total education and training programs for in-school and out-of-school youth will become a reality. Fourteen presentations aimed specifically at the needs of economically and culturally disadvantaged youth are abstracted in this report. They include "Working with Disadvantaged Youth--Vocational Competencies," by Charlotte Epstein; "Status Report on Research on Vocational Teacher Characteristics," by Edward Ferguson; "Preparing Vocational Teachers for the Disadvantaged," by Ted Ward; "Law Dimensions in Teacher Education," by Adelaide Joblonsky; "Improving Teacher Education Through the Utilization of Models," by Dale Hamreus; "Current Trends in Vocational Certification," by Richard Adamsky. An analysis of the data gathered through means of the various evaluations revealed that the institute was highly significant and met the stated objectives. However, it was noted that there was little change in attitude and opinions of the participants as a result of the 2-week institute. Also it was recommended that there should be other institutes of this nature.

120. Nichols, Charles W. Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas. Final Report. Philadelphia: Temple University, Division of Vocational Education, February 1971. 103p.
ED 056 186. EDRS Price: MF-$0.65; HC-$6.58.

Nineteen participants, along with special consultants, took part in an institute designed to examine and categorize the information services needed by vocational educators in order to use research and other technical information in planning, implementing and evaluating vocational education programs. A second objective of the institute was the assessment of the major active or planned information systems or services relevant to vocational education. Presentations heard at the institute included "ERIC" An Information System," by Roy Bulter; "Research Coordinating Units as an Information System," by Clayton Omvig; "An Innovative Program: The Minneapolis Work Opportunity Center," by Michael Joseph; "Occupational Training Information System," by Paul Braden; and "A New Approach to Vocational Teacher Education," by Carl Gorman. Techniques as such total group lectures, large and small group discussion, small group work sessions, and individual conferences with the resource consultants were used to enhance the skills and knowledge of participants and to achieve the objective of the institute. An analysis of a 6-month followup indicates high participant satisfaction with most aspects of the institute.

121. Righthand, Herbert. Improving the Preparation of Professional Personnel for Vocational Education in Metropolitan Areas. VII. Final Report. Philadelphia: Temple University, Division of Vocational Education, February 1971. 137p.
ED 055 247. EDRS Price: MF-$0.65; HC-$6.58.

This institute was designed to study the needs and problems of vocational teaching in metropolitan areas and to recommend model teacher preparation practices. A total of 60 participants, representing 23 states, Washington, D.C., and the Virgin Island, took part in this program, which consisted of general sessions, homogeneous and heterogeneous small group sessions, and a field trip to an inner-city program. The general conclusion was that there is need for greater flexibility and breadth in teacher requirements, certification, and pre- and in-service education. Recommendations include occupational experience for guidance personnel, guidance courses for vocational teachers, vocational courses for all teachers, flexible curricula and methodologies in the areas of sociology and psychology, and the suggestion that colleges and universities should provide a vocational-technical teacher preparation program which extends beyond the confines of its classrooms.

122. Crum, Dwight R., and others. Vocational Education for the 1970's: Conference Discussion Paper. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, Division of Vocational and Technical Education, March 1971. 13p.
ED 053 301. EDRS Price: MF-$0.65; HC-$3.29.

Vocational education in this decade must be conceptualized as life-long career development for every person who can profit from such a program. A framework for a career education system must be provided that will introduce the world of careers; provide exploration, guidance, and counseling; provide specific skills; provide pre-technical and more technical education; and upgrade and retrain throughout adulthood. Objectives of vocational career development and the goals of vocational education are identified. Upon these, proposed elements of a career education model are stated. Some of these components are (a) Career education will replace general education; (b) Priority will be given to special target groups; (c) Career education will begin in the elementary grades and continue through life; (d) Job placement and followup will be a continuous school functions; and (e) Effective and continuous evaluation is required. To effect this system, the present vocational education delivery system must be modified.

123. Davis, J. Clark, and Len L. Trout. Improving Preparation of Professional Personnel for Vocational Education in Metropolitan Areas. VI, Final Report. Reno: University of Nevada, College of Education, May 1971. 349p.
ED 055 241. EDRS Price: MF-$0.65; HC-$13.16.

This report presents the proceedings of a 4-day institute attended by 82 individuals representing university personnel, state department of education personnel, and local school district personnel. Conducted in response to critical problems in vocational teacher education, the institute focused on ways to locate and prepare adequate numbers of teachers to work with urban disadvantaged youth. The general plan of attack adopted by the institute was to have each participant, with the help of the 19 consultants, develop a training model appropriate for his own situation. To this end, the format of the program consisted of a series of formal presentation, a question-and-answer panel, small group work sessions, and a variety of evaluation of the proceedings. A major conclusion advanced by this institute was that the teacher education model needs to stress that the teacher is both a manager of resources and an effective specialist in a prescribed area. Among the more than 15 formal presentations were "The Need for Flexible Instructional Systems" by Howard McFarm and "Desirable Characteristics of Vocational-Technical Teachers for Metropolitan Areas" by Duane Nielsen.

124. Marland, S. P., Jr. "Educating for the Real World." Speech delivered to the annual meeting of the Jefferson County Chamber of Commerce, May 26, 1971, Harpers Ferry, W. Wa. 13p.
ED 053 309. EDRS Price: MF-$0.65; HC-$3.29.

For a variety of reasons, vocational education has not made it in America. Our high schools have not been able to make sure that every young man and woman who receives a diploma is qualified either for immediate employment or further education. To solve the problems of this situation, the U.S. Office of Education is giving major emphasis to the design of a workable career education system that can be tested at a

number of federally financed pilot installations and, when satisfactorily developed, offered to the entire country. Along these lines three model career education programs are being developed--one for use in schools, a second to be generated within the business community, and a third to take place in the home. These models represent the first attempt to devise a career education system for virtually all Americans from which the learner spins off at any level of maturity, whether as an auto mechanic or a physician, at the level of growth he chooses.

125. Beasley, Gary, and James Smiley. Occupational Experiences for Vocational Education Teachers: A Handbook for Teacher Educators. Columbus: Ohio State University, Center for Vocational and Technical Education, June 1971. 32p. ED 060 174. EDRS Price: MF-$0.65; HC-$3.29.

New avenues and arrangements must be found for improving the occupational competency of teachers in order to meet the demand for skilled and recently-trained workers. This publication was designed to help teacher educators develop cooperative programs for present and prospective teachers. The compact nature of the review and organization into guideline format should provide a ready reference for the practitioner seeking to develop and improve occupational experience programs for teachers in his college or university. Special attention was directed toward a review of existing programs, the development of guidelines for future program development, areas of concern, and alternative approaches.

126. Cotrell, Calvin J., and Charles R. Doty. An Analysis of Face-to-Face, Video, and Remote Audio Feedback Techniques. Assessment of Micro-Teaching and Video Recording in Vocational and Technical Teacher Education, Phase I. Final Report. Columbus: Ohio State University, Center for Vocational and Technical Education, June 1971. 48p. ED 052 325. EDRS Price: MF-$0.65; HC-$3.29.

Presented in this report are the results of the feasibility testing of selected micro-teaching and video-recording feedback techniques in a laboratory setting designed to simulate vocational teacher education. Volunteer teachers were selected and randomly assigned to three treatment groups in a repeated measurement design to compare the relative effectiveness of three different feedback techniques: face-to-face conferences, face-to-face conference with video feedback, and remote audio video feedback. Twelve teachers, four with each of three groups, practiced the skill of introducing a lesson during five 5-minute teaching sessions over a period of 3 weeks and were evaluated by a panel of two judges. Variance analysis at the .05 level revealed no significant difference in performance among the groups over the series of teaching sessions. It was also found that the group receiving face-to-face conference with video feedback increased its performance on teaching sessions four, while the other two groups decreased their mean performance scores as compared to the mean scores for all groups

on teaching session three. It was concluded that all feedback techniques were feasible for field testing, but modifications were recommended in the remote feedback techniques.

127. Miller, Jack Dean. "A Factor Analysis of Professional Education Competencies and Selected Community College Instructors." Unpublished Doctor's dissertation, Oregon State University, June 1971. 98p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 71 25069.
ED 054 340. Not available from EDRS.

To determine the professional education competencies of selected community college vocational instructors, a mail survey questionnaire containing 99 competencies together with a five-point Likert-type scale was used to gather data from a random sample of 160 instructors of business and distributive education at the community college level in four western states. Data were analyzed to determine if there were differences among the community colleges in their responses to the competencies contained in the questionnaires. The factor analysis of data revealed that the business and distributive education instructors agreed in their responses and demonstrated that it is possible to generate factors containing clusters of common professional education competencies. Competencies which clustered under the factors of Instructional Management and Teaching-Learning Process were judged to require the highest level of proficiency.

128. Wayne State University, Department of Industrial Education. Implementation of Selected Missions, Vocational and Applied Arts Education Program. Final Report. Detroit: the Department, June 1971. 127p.
ED 054 348. EDRS Price: MF-$0.65; HC-$6.58.

The first phase of this Special Vocational Teacher Education Project studied methods of updating the vocational and applied arts education program at Wayne State University. This included the classification of goals for divisional offerings, assistance in establishing divisional policies, and the development of a model for an undergraduate vocational teacher education program for transfer students from community colleges. The divisions referred to include the former departments of Industrial Education, Business Education, and Family Life Education at Wayne State University. Phases II and III were concerned with developing curriculum materials for industrial teacher education, developing trade competency examinations, and planning for the professional development of the staff. This final report describes what took place, what materials were developed, and the applications and responses from the Industrial Education Curriculum Area.

129. American Vocational Association. Vocational Education and Self-Evaluation. The Vocational Education Instructor Appraises Product and Process. Washington, D.C.: the Association, August 1971. 40p.

ED 056 177. EDRS Price: MF-$0.65; HC-$3.29.

Designed to be brief and informative, these guidelines should be of assistance to vocational education instructors in their efforts toward self-evaluation. Guideline statements representing those important areas into which an instructor should make inquiry have been tested in the field and represent essential elements which have received general approval. These statements focus primarily on those aspects of vocational education evaluation which include the predominant areas of manipulative skills, technical knowledge, related theory and auxiliary information. Statements are organized into the following sections (a) groups served by vocational education, (b) the vocational education instructor, (c) curriculum, (d) facilities and equipment, (e) finances and budgets, (f) placement and followup, (g) community involvement, (h) related services, and (i) involvement in policy-making in vocational education.

130. Edwards, Leonard D. "An Evaluation of the Industrial Arts Teacher Education Program at Black Hills State College by the Graduates." Unpublished Doctor's dissertation, University of Missouri, August 1971. 141p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106. ED 055 173. Not available from EDRS.

The major purpose of this study was to evaluate the importance of the basic elements of the courses taught in the industrial arts teacher education program at Black Hills State College. Another purpose was to obtain data relative to the status and geographic location of the graduates. A list of 86 graduates who majored in industrial arts from 1960 through 1969 was obtained and each one was sent an information form developed by the investigator, with a total of 92 percent returned. Findings were that the majority resided outside of South Dakota, that 75 percent were employed in the field of education, and that almost one-half had received advanced degrees. It was concluded that the program is deficient in terms of facility, equipment, and program of offerings, and that more emphasis should be placed on modern industrial processes in all areas. The areas of drafting, woodworking, and plastics appeared to be satisfactory, while six other areas lacked adequate preparation.

131. Holloway, Lewis D., and Larry J. Bailey. Developing Teaching Competencies Needed by Educational Personnel in Post-Secondary Health Occupations Programs. Final Report. Vol. I. Iowa City: University of Iowa, Division of Health Affairs, August 1971. 201p.
ED 060 181. EDRS Price: MF-$0.65; HC-$9.87.

This project was to stimulate individuals and institutions to conduct short-term teacher education activities for persons in the health occupations field, because this program has been growing rapidly, teacher education activities have not kept up with the expansion. An institute, consisting of 85 participants, six staff members, and 13 consultants, included general presentations, panel discussions,

small group discussions, micro-experiences, and informal activities. As a result of the institute, a publication of the guidelines and general presentations was compiled (Volume II of this final report, available as ED 037 581) and a model in-service teacher education course on classroom testing was developed. Based on pre- and post-test, an evaluation of modular units, and a 1-year followup, the program was judged a success. Recommendations call for continuing efforts to be directed toward teacher education needs of those in health occupations education.

132. Blanton, Lloyd H., and others. Opinion Leadership and Communication Linkages among Agricultural Educators. Final Report. Columbus: Ohio State University, Center for Vocational and Technical Education, September 1971. 79p. ED 056 172. EDRS Price: MF-$0.65; HC-$3.29.

This study of opinion leadership among vocational agriculture teachers in South Carolina solicited nominations of teachers as sources of information and advice from participating teachers at two different points in time, spring 1968 and spring 1970. This time-lapsed design allowed an estimate of opinion leadership stability since the sample of teachers remained the same except for natural shifts due to teacher replacement and program changes. In addition, this study attempted to replicate the key-informant versus sociometric techniques comparison for identifying opinion leaders. Data were collected on reasons for the opinion leadership selection and the communications linkages for face-to-face relationships among teachers, supervisors, and teacher educators. Major conclusions of the study included (a) Teachers of vocational agriculture named as opinion leaders were older, had more earned college credit, and had attended a greater number of workshops than their peers; Teachers nominated as opinion leaders in more than one instructional area were stable for the 2-year period, while the opposite was true for teachers nominated in only one area.

133. Cotrell, Calvin J., and Charles R. Doty. Assessment of Micro-teaching and Video Recording in Vocational and Technical Teacher Education: Phase II--An Analysis of Face-to-Face, Remote and Delay-in-Feedback Techniques. Final Report. Columbus: Ohio State University, Center for Vocational and Technical Education, September 1971. 49p. ED 057 189. EDRS Price: MF-$0.65; HC-$3.29.

This is the second in a series of three tests of selected micro-teaching and video-recording techniques designed to facilitate the identification of alternate ways to increase the effectiveness of vocational teacher education. The tests were conducted to develop feedback techniques in a laboratory under simulated teacher education conditions. This development effort further served as a screening device for the most promising techniques prior to seven demonstration and field testing activities which were part of the project, "Assessment of Micro-teaching and Video Recording in Vocational and Technical Teacher Education." With full cognizance of the limitations of the feasibility study, i.e.,

the size of the sample and the number of simulated teaching sessions, several conclusions were reached. These include (a) Teachers may improve their performance on pedagogical skills as well under remote and delay-in-feedback techniques as they do under conventional face-to-face conference techniques; (b) The micro-teaching technique may be more beneficial than the particular feedback technique used with it; and (c) The micro-teaching process was appropriate for testing the feasibility of the feedback techniques in a simulated vocational education program. Related documents are ED 057 190, Phase III, An Analysis of Instructional Model and Remote Feedback Techniques; ED 057 192, Phase IV, Classroom Application of Micro-teaching and Video Recording; ED 057 193, Phase V, Preservice Trade and Industrial Teacher Education; ED 057 194, Phase IX, Micro-Supervision; ED 057 197, Phase VI, Feedback Techniques for Inservice Technical Teacher Education; ED 057 201, Phase VIII, Feasibility of Remote Supervision of Home Economics Student Teachers; and ED 057 206, Phase VII, Feedback Techniques in Inservice Methods Courses.

134. Marland, Sidney P., Jr. Career Education. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, September 1971. 3p.
ED 056 203. EDRS Price: MF-$0.65; HC-$3.29.

Career education combines vocational, general, and college-preparatory education into a curriculum designed to provide educational experiences that will prepared an individual for economic independence, personal fulfillment, and an appreciation for the dignity of work. Career education will be integrated in the early school years, beginning with kindergarten and progressing through grade 12. In the elementary years, the curriculum will relate reading, writing, and arithmetic to the ways adults earn a living, and during junior high school years, students will explore career opportunities in various occupational clusters. By senior high school, students will concentrate on one cluster, developing sufficient skill in a specific occupation to qualify for a job. Even though the students are preparing for a job upon graduation from high school, they will always retain the option of going on to higher education.

135. Feck, Vincent. What Vocational Education Teachers and Counselors Should Know About Urban Disadvantaged Youth. Columbus: Ohio State University, Center for Vocational and Technical Education, October 1971. 47p.
ED 059 351. EDRS Price: MF-$0.65; HC-$3.29.

This publication is designed to serve teachers and counselors interested in reviewing the key concepts relative to working with disadvantaged youth in urban areas. The compact nature of the review and its organization into guideline format should provide a ready reference for the practitioner seeking to improve his instruction. Major sections of the document include (a) Characteristics of Urban Disadvantaged Youth and Their Environment, (b) Guidance and Counseling, (c) Curriculum Design and Content, (d) Teaching Techniques, (e) Teacher Characteristics, and (f) Placement of Students.

136. Walker, Robert W. What Vocational Education Teachers Should Know About Disadvantaged Youth in Rural Areas. Columbus: Ohio State University, Center for Vocational and Technical Education, October 1971. 29p.
ED 059 352. EDRS Price: MF-$0.65; HC-$3.29.

Because of poor attitudes toward educational involvement and a lack of basic scholastic skills, some students do not succeed in the regular programs offered in the high schools. Intended to be an authoritative analysis of the literature in the field, this state-of-the-art paper should serve as a guideline for teachers concerned with the development of programs at the local level to meet the needs of students identified as academically disadvantaged. The paper focuses on rural, academically disadvantaged students, the factors which contribute to their maladjustment, and their personal characteristics. Conclusions reveal that programs must be student-centered and designed to meet individual needs. Successful programs can be developed for students through the total involvement of the school staff and the community. Related documents are available as ED 058 390 and ED 057 181.

137. Bjorkquist, David. What Vocational Education Teachers Should Know About Individualizing Instruction. Columbus: Ohio State University, Center for Vocational and Technical Education, November 1971. 15p.
ED 057 184. EDRS Price: MF-$0.65; HC-$3.29.

Teachers are increasingly becoming managers of the learning process rather than dispensers of knowledge and are being challenged to individualize their instruction to account for variability. Classroom objectives, characteristics of the learner, and the learning process are the focal points of this publication. Although there will continue to be considerable trial and error in individualizing instruction, the vocational teacher can use the following general guidelines: (a) The task to be learned should be divided into components which can be accomplished by the learned; (b) The instructional program should begin at a point commensurate with the learner's capabilities and prior knowledge; and (c) Principles by which individuals learn should be used in planning and selecting individualized instruction.

138. Ferns, George W. Michigan's Vocational-Technical Education Personnel Development Needs, 1971-1975. Lansing: Michigan State Department of Education, November 1971. 288p.
ED 060 192. EDRS Price: MF-$0.65; HC-$9.87.

The need for a comprehensive, coordinated plan of vocational-technical education personnel development in Michigan prompted the establishment of guidelines for a study. Teacher education funds provided finances, and after a director was appointed, and study began June 1970. This report supplies background information necessary for decision-making in establishing a state plan for personnel development equal to the requirements of the 1970's. A description of recent and prospective developments in vocational-technical education in the state, the supply and demand of personnel, and alternatives and recommendations are provided.

139. Cotrell, Calvin J., and others. Model Curricula for Vocational and Technical Education: Report No. 1. Performance Requirements for Teachers. Final Report. Columbus: Ohio State University, Center for Vocational and Technical Education, December 1971. 142p.
ED 059 355. EDRS Price: MF-$0.65; HC-$6.58.

This first phase of a project initiated to develop, demonstrate, and test curricula for the preparation and in-service education of vocational and technical education teachers was devoted to determining the performance requirements of teachers. During this phase, 237 performance elements were identified through application of occupational analysis techniques, and common, mixed, and unique pedagogical performance elements were identified by a task force representing seven vocational services. An additional 30 performance elements were identified and 147 performance elements were verified through a national critical incident study, and 226 performance-oriented general objectives were developed. The conclusions of the study indicated that most pedagogical performance requirements for teachers were common to all vocational services, and that meaningful specific objectives could not be developed without consideration for a particular institutional setting. It was recommended that core offerings be considered for a majority of the curricula to be developed and that performance-oriented general objectives be prepared as guidelines for writing specific objectives.

140. Cotrell, Calvin J., and others. Model Curricula for Vocational and Technical Teacher Education: Report No. 2. General Objectives-Set I. Final Report. Columbus: Ohio State University, Center for Vocational and Technical Education, December 1971. 165p.
ED 059 354. EDRS Price: MF-$0.65; HC-$6.58.

This document presents performance-oriented general objectives, intended as guidelines for writing specific objectives for vocational and technical teacher education curricula. These general objectives are based on an extensive enumeration and analysis of important pedagogical performance requirements for teachers of conventional vocational programs. Although not tested in actual program operation, the objectives have been reviewed by teacher educators and subsequently refined. The objectives are presented for each of the 10 categories of duties or functions found to be required of teachers. Finally, the development of specific instructional objectives from the general objectives is illustrated by examples. Appendixes include a glossary of terms and a master list of performance elements referenced to the related general objectives in the main text. A related document is available as ED 059 355.

141. Cauley, Michael Jon. "Industrial Arts and Environmental Education: Environmental Concepts Judged Applicable to Industrial Arts Teaching Areas by Industrial Arts Teacher Educators." Unpublished Doctor's dissertation, University of Northern Colorado, 1971. 141p. Available from University Microfilms,

P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 72-13307.
ED 058 458. Not available from EDRS.

To establish a definite relationship between industrial arts and environmental education, an attempt was made to determine which environmental concepts should be taught in industrial arts as a subject matter area and which concepts should be taught in the various teaching areas within the traditional industrial arts programs. A qualified jury selected 53 concepts, which were categorized by 313 industrial arts teacher educators in specific teaching areas. It was found that 52 of the 53 environmental concepts were considered applicable to the industrial arts teaching areas at the 66 percent level of agreement. Percentage figures of the total were derived to indicate those concepts most applicable to specific areas: 3.8 percent to each of the areas of metals, graphic arts, and plastic-crafts; 17.3 percent to drafting; 23.1 percent to power; and 48.1 percent for woods. It was concluded that there is a concrete relationship between industrial arts and environmental education and that the concepts used in this study should be included in the traditional industrial arts teacher education programs.

142. Coleman, Jay Mario. "The Current Status and Possible Trends in Teaching Industrial Arts Wood Information at Teacher Education Institutions." Unpublished Doctor's dissertation, University of Northern Colorado, 1971. 113p. Available from University Microfilms, P.O. Box 1764 Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00.
ED 055 195. Not available from EDRS.

To investigate the present status of the wood area in selected teacher education institutions and to discover possible trends which might be useful in improving the college wood programs, a questionnaire was developed and sent to 122 industrial arts instructors, and the results were compared on a percentage basis. Specific findings were that (a) A majority of the instructors had some work experience in related industries; (b) The related information emphasized most in the first skill-oriented wood courses was safety, tool identification, adhesives, lumbering, wood identification, and board feet computation; (c) Cabinet making or furniture construction was offered most often; (d) Most instructors felt that the program should include a study of wood, its industry, and its products; and (e) Approximately three-fourths felt that the innovative programs had meaningful implications toward the college. Some conclusions were that the present instructors should be capable teachers because of their experience, that the learning experiences of the wood project should be changed, and that wood technology will become a major course offering in the college wood curriculum.

143. Evans, Rupert N., and David R. Terry, eds. Changing the Role of Vocational Teacher Education. Urbana: University of Illinois, College of Education, 1971. 219p.
ED 059 399. EDRS Price: MF-$0.65; HC-$9.87.

A 4-day institute attended by 21 persons representing vocational education, general education, and state and federal government was held to review the state of the art in vocational teacher education. Discussion activities centered around state-of-the-art papers, and this book contains these chapters based on revisions of the major papers: "The Quality of Life in the Seventies and Implications for Vocational Teacher Education," by J. C. Willers; "Assumptions Underlying Preservice Programs for Beginning-Level Vocational Teacheers," by J. Moss, Jr.; "Assumptions Underlying In-service Vocational Teacher Education Programs," by A. D. Hill; "Curriculum Development in Vocational Teacher Education: State of the Art and Developmental Needs," by E. J. Simpson and M. L. Ellis; "Organizational Structure of Vocational Teacher Education," by R. E. Taylor and A. J. Miller; "The Context of Vocational Teacher Education," by R. E. Taylor and A. J. Miller; "The Need for Vocational Educational Personnel," by T. G. Foran and J. J. Kaufman; "Critique of Manpower Projections for Instructional Staff in Vocational Education," by G. G. Somers; and "Evaluation of Vocational Teacher Education," by D. Sjogren.

144. Frye, Bill J. "An Analysis of Teacher Education Innovations with Recommendations for Their Utilization in the Professional Preparation of Prospective Industrial Arts Teachers." Unpublished Doctor's dissertation, Ohio State University, 1971. 270p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00; order number 71-27471.
ED 053 335. Not available from EDRS.

This study investigated and provided relevant information on the use of innovative practices, such as methodology, teaching skills, etc., by industrial arts teacher educators who teacher professional courses. Data were obtained from a synthesis of information retrieved from practicing industrial arts teacher educators and from a review of related literature. An initial survey involving 161 educators revealed that only video-tape recorders, microteaching, and field experience prior too student teaching were substantial. From this data, nine other questionnaires asking for specific procedures and recommendations associated with the use of the innovation were developed, and industrial arts departments received from one to three of them. Recommendations could only be developed for the video-tape recorders, microteaching, field experience prior to student teaching, and a limited treatment of interaction analysis due to the limited use of these innovations by industrial arts teacher educators. It is recommended that more emphasis be placed on these innovations by the teacher educators.

145. Hoots, William R., ed. Industrial Arts in the Elementary School: Education for a Changing Society. Greenville, N.C.: National Conference on Elementary School Industrial Arts, 1971. 34p.
ED 059 373. EDRS Price: MF-$0.65; HC-$3.29.

This conference, attended by 21 teacher educators, supervisors, and people working with elementary children in the classroom, consisted of three meetings during the 1969-70 academic year. This report deals with the

nature of industrial arts in the elementary school, different approaches and requirements for implementation, and some ways of meeting and solving some of the problems. Philosophically, industrial arts helps the elementary school child build an understanding of his world. Within the dimensions of physical setting and organizational mode, effective learning takes place through interaction, exploration, experimentation, problem solving, and concrete experiences that satisfy aesthetic and utilitarian needs. Approaches include programs using limited classroom, comprehensive classroom, the laboratory, the traveling teacher, the mobile laboratory, the central laboratory, and summer school. Discussions of essential components of effective leadership and of preservice and in-service teacher education programs are included.

146. Kay, Evelyn R. Vocational Education: Characteristics of Teachers and Students, 1969. Washington, D.C.: U.S. Department of Health, Education and Welfare, Office of Education, National Center for Educational Statistics, 1971. 82p.
ED 050 297. EDRS Price: MF-$0.65; HC-Not available.

Despite the long existence of vocational education in the school system, very little is known about the characteristics of the participants. Thus, this report presents the findings of a study of the characteristics of vocational education teachers and students. Information on the professional qualification and teaching experiences of teachers is examined in relation to other characteristics and to the types of vocational education programs being taught. Information on students includes individual and family characteristics, program and labor force activity, and plans for the future. Among the findings of this report are that (a) the typical vocational education teacher is a male in his early 40's; (b) median earnings of vocational education teachers are approximately $8,700 for a contract year; and (c) there are slightly more female than male vocational students. However, males outnumber females at the postsecondary level.

147. Rau, Gerald N. "The Relationship of Occupational Experience and Professional Preparation of Machine-Trades Teachers to the Achievement of Machine-Trade Students." Unpublished Doctor's dissertation, University of Missouri, 1971. 204p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00.
ED 057 186. Not available from EDRS.

The primary purpose of this study was to ascertain the relationship between the occupational experience and professional preparation of machine-trade teachers and the achievement of machine-trades students taught by these teachers. Data were obtained through a mailed information form involving 46 teachers from six states and the achievement test scores of 510 junior students. Multiple regression analysis, encompassing selected teacher characteristics, was employed to predict student achievement on the three test segments of the Ohio Machien-Trades Achievement Test. Analysis of variance was utilized to test achievement differences of students who had trades-trained teachers

and students who had institutionally-trained teachers with trade experience. Specific conclusions were that (a) A Student's native intelligence was the vital element in predicting student achievement on each test segment; (b) The increase in machine-trades industrial experience was related to greater student achievement on respective test segments; and (c) The teacher's college credit hours beyond minimal level appear to be unrelated to greater student achievement.

148. Russell, Earl Bell. "Development of an Instrument To Measure the Change Orientation of Vocational Teachers." Unpublished Doctor's dissertation, Ohio State University, 1971. 162p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00. ED 055 199. Not available from EDRS.

To develop and test an instrument designed to measure change orientation in vocational teachers as a means of identifying potential innovators and teachers most receptive to change, 250 vocational teachers were divided into "early adopter" and "laggard" groups and were administered on instrument containing eight attitude subscales designed to measure change orientations. In addition, a short form of the Rokeach Dogmatism Scale, Rotter Internal-External Control Scale, Dye Local-Cosmopolitan Scale, and the McClosky Conservatism Scale were included in the instrument for cross-validation and for assessing attributes believed to be closely associated with change orientation. Usable returns from 78 percent of the early adopter groups and 69 percent of the laggard group revealed that change orientation is measurable. Early adopters and laggards differed significantly in five of the attitude subscales, and a general factor scale identified by factor analysis, consisting of 21 items, was a powerful discriminator between the groups. Construct validity was confirmed by the finding that teachers with high change orientation scores were less dogmatic, less conservative, and more cosmopolitan in view points. Concurrent validity was confirmed by the finding that early adopters had over twice as many unusual or unique features in their instructional programs as did laggards.

149. Syhlman, Bill D. The Professional Internship Exchange Program in Vocational Education, 1970-1971. Cheney: Eastern Washington State College; Olympia: Washington State Coordinating Council for Occupational Education, 1971. 64p. ED 054 377. EDRS Price: MF-$0.65; HC-$3.29.

Designed to give vocational education teachers actual experience in business and industry, this project involved the joint efforts of Eastern Washington State College and several government and private agencies. The project centered around 10 teachers selected from the various service areas of vocational education who exchanged positions for 6 weeks with 10 people from business and industry. The document presents a description of the project, an account of the various activities, and a list of the accomplishments. Major sections of the report include Project-Design for Accomplishing Objectives, Workshop Report, Project Evaluation, and Bibliography.

150. Weiner, Donald A. "Evaluation of the Industrial Arts Teacher Education Curriculum at Peru State College." Unpublished Doctor's dissertation, University of Northern Colorado, 1971. 281p. Available from University Microfilms, P.O. Box 1764, Ann Arbor, Mich. 48106; price: mf $4.00, xerography $10.00.
ED 055 192. Not available from EDRS.

This study evaluated the total industrial arts teacher education curriculum at Peru State College which consists of industrial arts education, professional education, and general education. Questionnaires were sent to the 103 graduates of the industrial arts teacher education curriclum and to the supervisors of the graduates employed in public schools. Some findings were (a) The greatest proportion of the graduates gave an above average rating to the industrial arts objectives, goals, and courses; (b) The need to lengthen the period of student teaching was listed by the graduates the greatest number of times in the recommendations for improving the professional semester; and (c) The industrial arts graduates did anticipate a future need for the general education courses of speech, mathematics, English Composition I, health, and English Composition II. It was recommended that a survey be conducted to determine the practicing needs of industrial arts teachers in Nebrasks, Iowa, and Kansas where the greatest number of Peru State College industrial arts graduates are teaching.

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